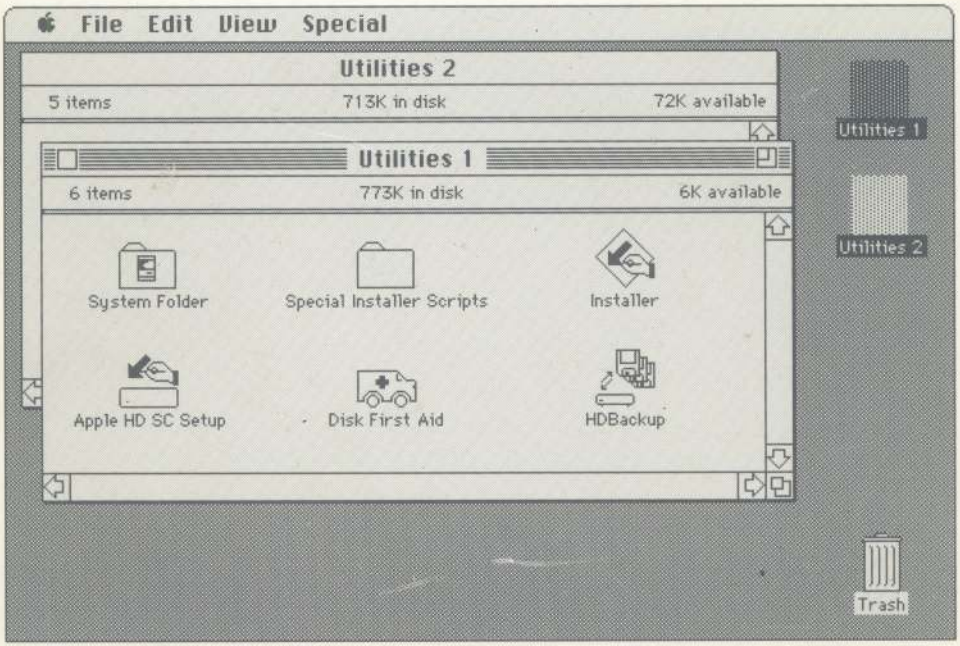
Macintosh® Utilities User's Guide



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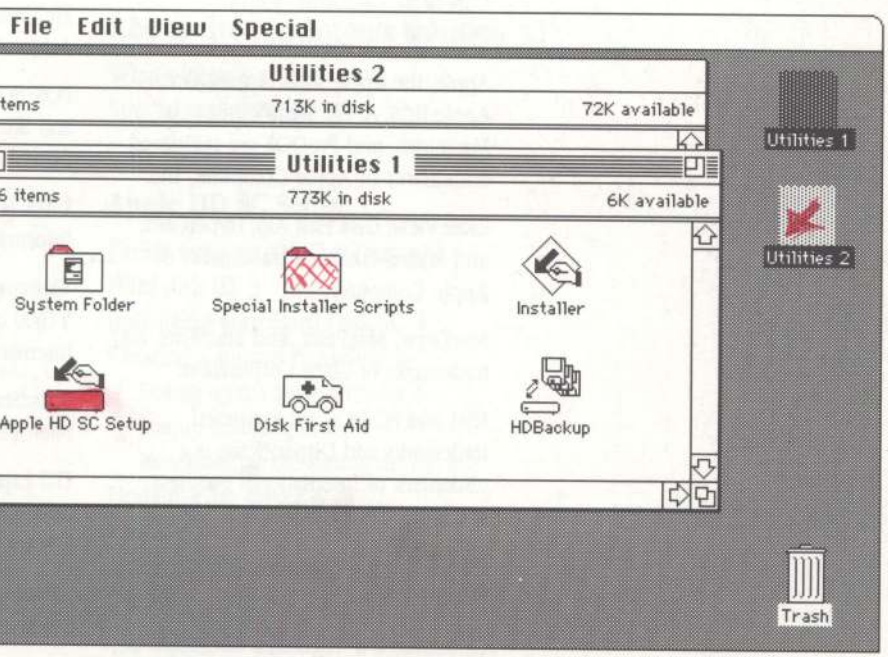

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About the Macintosh Utilities

THE *MACINTOSH UTILITIES USER'S GUIDE* DESCRIBES TEN UTILITY PROGRAMS designed for use with your Macintosh® computer. They are found on the two *Utilities* disks.

This manual assumes that you have already mastered the basics of your Macintosh, as explained in your *Macintosh System Software User's Guide*. If you need a quick refresher on the use of the directory dialog box, refer to the Appendix, "Moving Through the File System," in this guide.

What's in each chapter

Read the chapter descriptions below to decide which utilities you're likely to find useful.

- Chapter 1 describes Apple HD SC Setup, which is found on *Macintosh Utilities* disk 1, and tells you how to create a startup hard disk.

  You need Apple HD SC Setup to prepare and test any of the Hard Disk SC series of Apple hard disks. This version of Setup allows you to partition your hard disk for use with more than one operating system—that is, your Macintosh hierarchical file system and another operating system, such as A/UX®, Apple's version of the AT&T UNIX® system for the Macintosh. However, if you don't need to partition your disk, just skip that section of Chapter 1.

  Apple HD SC Setup is also found on the *System Tools* disk, and a version of Apple HD SC Setup is included on the disk and in the owner's guide that accompany the external Apple Hard Disk SC's. If you're upgrading your Macintosh with an internal hard disk, you probably need to use the version of Apple HD SC Setup that's on *Utilities* disk 1 to prepare the disk for use. In that case, you need to read this chapter.

- Chapter 2 explains HD Backup, an application that helps you protect your hard disk files by copying them onto 3.5-inch disks and restoring them, if necessary. HD Backup is found on *Utilities* disk 1.

- Chapter 3 describes Disk First Aid™, which is also found on *Utilities* disk 1. You use Disk First Aid to examine and repair damaged disks. Please note: Disk First Aid works best if you set up a "Disk First Aid disk," as described in Chapter 3, before you need to use the program.

- Chapter 4 covers Font/DA Mover, which you need to transfer fonts and desk accessories to and from a System file. Font/DA Mover is found in the Font/DA Mover Folder on *Macintosh Utilities* disk 2.

- Chapter 5 describes Find File, a desk accessory that helps you search for and open files. The current version of Find File contains a "Move to Desktop" command. If you're already using Find File without this feature, you'll probably want to replace it with the current version. Find File is found in the Desk Accessories file in the Font/DA Mover Folder on *Utilities* disk 2.

- Chapter 6 explains MacroMaker, a utility that allows you to record sequences of characters and commands and play them back by using the MacroMaker menu or by pressing keys or key combinations that you've assigned. The MacroMaker Folder on *Utilities* disk 2 contains MacroMaker, the MacroMaker Help file, and a preset Macros file for use only with the Apple Extended Keyboard.
- Chapters 7 and 8 describe Apple File Exchange (AFE), which you can use to transfer and translate files between the Macintosh and certain other computers. AFE appears, along with the translator file DCA-RFT/MacWrite, which is also explained in Chapters 7 and 8, in the Apple File Exchange Folder on *Utilities* disk 2. Chapter 7 introduces you to Apple File Exchange and explains how to use it. Chapter 8 tells you how to take advantage of the file exchange utility's advanced features.
- Chapter 9 tells how to use Map, a utility that you install in the Control Panel desk accessory. Map allows you to display the location and time zone of cities and other locations anywhere on Earth, and to compare the time and calculate the distance between any selected location and your current location. Map is found on *Utilities* disk 2.
- Chapter 10 tells you how to use the Installer, found on *Utilities* disk 1, to carry out a special installation. You can create a startup disk containing a small System Folder, tailored to your particular kind of Macintosh, and you can set up your Macintosh as a workstation using the AppleShare™ file server.
- Chapter 11 explains CloseView, a utility which, when it is installed in your Control Panel desk accessory, allows you to magnify the contents of your Macintosh screen. Because CloseView is designed primarily for use by visually impaired people, Chapter 11 is printed in larger type than the rest of this manual, and it contains its own, large-print version of the chapter's table of contents. CloseView is found on *Utilities* disk 2.
- The Appendix, mentioned earlier, summarizes how to use the Macintosh directory dialog boxes, something you need to know, not only to use these utilities, but to work with most Macintosh applications.

Utilities disk 1 contains those utilities which are most useful on a startup disk: Apple HD SC Setup, Disk First Aid, and at times HD Backup and the Installer must be opened from a 3.5-inch startup disk (unless you have more than one hard disk).

However, the System Folder on *Utilities* disk 1 contains none of the printer resources found on your *Printing Tools* disk, and it does not contain all the system software found on your *Macintosh System Tools* disk. Its System file does not contain all the fonts and desk accessories found on your *Macintosh System Tools* disk, but those missing fonts and desk accessories are also found in the Fonts file and Desk Accessories file in the Font/DA Mover Folder on *Utilities* disk 2. (For more on System files, System Folders, and startup disks, see your *Macintosh System Software User's Guide*. See "Font/DA Mover," Chapter 4 in this guide, to learn how to install fonts and desk accessories.)

If the utilities and folders described here are not in view on your Macintosh desktop, select and open (or double-click) the icon representing either utilities disk.

Special text elements

Several special elements in this manual's text are designed to make learning easier.

❖ *Note:* A note like this presents additional information or interesting sidelights.

△ Important Be sure to read every item that's labeled this way, with a tag in the margin. △

▲ Warning Warnings like this alert you to situations where you could damage software or lose data. ▲

Definitions of terms and references to other parts of the book sometimes appear in the margin.

Terms in **boldface type** are defined in the glossary. Sometimes the definition or additional information about such terms also appears in the margin.

Apple HD SC Setup

YOU NEED APPLE HD SC SETUP, A PROGRAM FOUND ON YOUR *MACINTOSH Utilities* disk 1, to prepare for use any Apple® SCSI Hard Disk—such as the Apple Hard Disk 20SC, the Apple Hard Disk 40SC, or the Apple Hard Disk 80SC—that's connected internally or externally to a Macintosh® computer with a SCSI port.

SCSI (commonly pronounced "SKUH-zee") stands for Small Computer System Interface. Any peripheral device, such as an Apple Hard Disk SC, that is designed to operate connected to the SCSI port found on the Macintosh Plus, the Macintosh SE, and the Macintosh II is called a *SCSI device*.

You can also use HD SC Setup to test your Hard Disk SC hardware and to divide your disk into **partitions.** This is an advanced feature of HD SC Setup that you use only if you plan to use your Hard Disk SC to store information from other types of computers or operating systems. (The last section of this chapter, "Creating Partitions," discusses this feature.)

△ **Important** To avoid problems, close all other applications before using Apple HD SC Setup, and make sure MultiFinder is turned off. △

For most purposes, you need to use a copy of Apple HD SC Setup, Version 2.0, that is on a 3.5-inch startup disk, such as your *Utilities* disk 1.

Earlier versions of HD SC Setup

If you're currently using a hard disk that was prepared using a version of Apple HD SC Setup before 2.0, keep both that version and the current version. In some situations, you may need to use the earlier one. (See "Replacing a Damaged Driver," later in this chapter.)

However, if you're preparing a new hard disk, in addition to having a hard disk that was prepared using an earlier version of Apple HD SC Setup, it probably makes sense to prepare both disks with the current version of Setup, to avoid confusion. In that case, you may be able to prepare the new hard disk, back up your files from the old one onto the new one, and then prepare the old one.

You can determine the version number of any copy of Apple HD SC Setup by selecting its icon and choosing Get Info, or you can look at the top line of the dialog box that appears when you open Setup (shown later in Figure 1-1).

Hard disk ID

SCSI cables let you connect up to seven SCSI devices on one system with a Macintosh. Each device must have a unique **SCSI ID number,** which serves as a kind of address. Just as you cannot receive mail without an address, neither the computer nor a device can send or receive files without a correct SCSI ID number.

△ **Important** Under no circumstances can two devices have the same SCSI ID number. You must assign a different ID number to each SCSI device that connects to a SCSI cable. △

Eight SCSI ID numbers are available to SCSI device users: 0 through 7. The Macintosh is always assigned number 7, which has highest priority. The SCSI number of an Apple internal hard disk is always 0. You can assign 1 through 6 to devices that connect to your Macintosh.

See the *Hard Disk SC Owner's Guide* for information on setting the SCSI ID number on an external hard disk. You must set the ID number and connect your hard disk to the Macintosh before you can initialize it.

Initializing your Hard Disk SC

The first time you start up your Hard Disk SC you need to run HD SC Setup to *initialize* the disk—that is, to prepare it to receive information by organizing its surface into tracks and sectors.

1. **Start your Macintosh using your *Utilities* disk 1 as the startup disk.**

2. **Open Setup by selecting its icon and choosing Open from the File menu, or by double-clicking the icon.**

   A dialog box appears. (See Figure 1-1.)

Figure 1-1
The main Apple HD SC Setup dialog box

Next to the words "SCSI Device" is a number from 0 to 6. If you have only one Hard Disk SC, the preset ID number of the drive automatically appears as the SCSI device number.

△ **Important** If you have two or more Hard Disk SC's connected, make sure that the SCSI device number matches the SCSI ID indicator number of the hard disk you wish to prepare or test. If they do not match, click Drive until they do. The SCSI ID number of your Apple internal hard disk is always 0, but if you have a SCSI hard disk from another manufacturer, consult your hard disk owner's manual. △

If, when you click Drive, the number of the second drive does not appear, the disk may be switched off or incorrectly connected. Check your power switch and connections.

The Update, Partition, and Test buttons are explained later in this chapter.

▲ Warning Make sure that you have chosen the hard disk that you want to initialize, and not some other hard disk. Initializing destroys all information on the hard disk. ▲

3. Click Initialize.

A dialog box appears, reminding you that initializing erases all of the information from the hard disk. To continue, click Init.

Messages appear in the Setup dialog box, explaining the course of the initialization. Initialization takes several minutes. The exact length of time depends upon the size of your hard disk and type of Macintosh.

A **driver** is a program that lets a peripheral device and computer send and receive files.

In addition to preparing the disk, Setup's Initialize command automatically tests the disk and installs the **driver,** which controls exchanges between the hard disk and your Macintosh.

If you see a message that the hard disk failed to initialize properly, try again. If you are still unable to initialize, there may be a hardware problem. See your authorized Apple dealer.

4. If necessary, name the disk.

Unless the disk is already named, a message tells you when initializing has been successfully completed and asks you to name the disk. You can type up to 27 characters, and you can use any keyboard character except the colon (:).

Press the Return key when you are sure you have entered the right name.

5. Click Quit.

If you plan to partition your disk, click Partition instead of Quit. Then turn to the section "Creating Partitions" later in this chapter.

Clicking Quit returns you to the desktop, where the Hard Disk SC icon appears with the name you gave it.

Creating a startup hard disk

To take full advantage of the speed and storage capabilities of your Hard Disk SC, you probably want to make it a startup disk. A **startup disk** is any disk that has the necessary program files—such as the Finder and System file, which are contained in the System Folder—to set the computer into operation. (See your *Macintosh System Software User's Guide* for a full discussion of startup disks.)

You need only one startup hard disk, regardless of how many SCSI hard disks are attached to your system.

Setting up the System Folder

There is no **System Folder** on the hard disk that you've just initialized. To put a System Folder on your hard disk, follow these steps:

1. **Insert your *System Tools* disk into your internal 3.5-inch disk drive.**

   If you want to use a System Folder that you have already customized, then insert instead the disk that contains that System Folder.

△ **Important** Do not use the System Folder from your *Utilities* disk 1. It may not contain all the fonts, desk accessories, and printing software found in the System Folder on your *Macintosh System Tools* disk. △

2. **Switch on your Macintosh.**

3. **Copy the System Folder from the current startup disk to the hard disk by dragging the System Folder icon to the hard disk icon.**

4. **If you're using a customized version of the System Folder that contains old system files or resources, use the Installer to update them.**

   The Installer is found on the *System Tools* disk and is described in your *Macintosh System Software User's Guide*.

5. **If necessary, use Font/DA Mover to add or remove fonts and desk accessories from your System file.**

   Font/DA Mover is in the Font/DA Mover Folder on your *Utilities* disk 2. It is described in this guide.

6. **Choose Restart from the Special menu to restart your Macintosh with your hard disk as the current startup disk.**

Startup scanning order

When you switch on the Macintosh, it automatically looks for a startup disk in this order:

1. Internal 3.5-inch disk drive(s). If you have a Macintosh SE with two disk drives, it looks first at the lower drive. If you have a Macintosh II with two disk drives, it looks first at the drive on the right.
2. External disk drive.
3. A Macintosh Hard Disk 20 (not a SCSI device).
4. The SCSI hard disk with the highest ID number.
5. Another SCSI hard disk with the next-highest ID number.

△ Important

If you wish to start up from your hard disk, do not insert a 3.5-inch disk until your Macintosh is operating. If you insert a 3.5-inch disk containing a System Folder when (or before) you switch on your computer, it becomes the current startup disk.

If you insert a 3.5-inch disk that is not a startup disk, your Macintosh ejects it and continues to scan for a startup disk. △

Redesignating the startup device

If you have a Macintosh SE or Macintosh II, you can use the Control Panel to override the scanning sequence during startup.

1. **Choose Control Panel from the Apple menu.**

2. **Click the Startup Device icon.**

   Use the scroll bar if necessary to bring the Startup Device icon into view.

3. **Click the icon that represents the hard disk you want to use to start up.**

   When you start up your computer, the system uses that hard disk as the startup disk, unless there is a 3.5-inch disk inserted or a non-SCSI hard disk connected.

   If you no longer want to designate the hard disk as your startup device, hold down the Command key and click the hard disk's icon in the Control Panel to deselect it.

4. **Close the Control Panel.**

❖ *Note:* If you have set your internal hard disk (SCSI device 0) as the startup device, and you want your Macintosh to ignore that hard disk during startup, press a combination of four keys—Command, Option, Shift, and Delete. The internal hard disk cannot be switched off separately.

Updating the driver

Whenever Apple develops a new version of the hard disk driver, it is built into Apple HD SC Setup. Setup's Update function is designed to allow you to install the latest version of the driver without erasing the information on your disk. Initializing, on the other hand, erases everything on your disk.

You may be able to update the driver if you have a version of Apple HD SC Setup later than version 2.0. You cannot, however, use version 2.0 or later versions of Apple HD SC Setup to update a hard disk that is initialized with a version before 2.0. If you need to replace a version before 2.0 with a newer version, you must back up your files, initialize the disk with the newer version, and then restore your files to the disk.

To update your driver:

1. **Start up your Macintosh using your *Utilities* disk 1 as the startup disk.**

2. **Open Apple HD SC Setup by double-clicking its icon.**

   Make sure the SCSI device number matches the SCSI ID number of the disk drive that you want to update. If it does not, click Drive until the device number and the SCSI ID number match.

3. **Click Update.**

4. **When Setup notifies you that the update is complete, click Quit to exit from Setup.**

Replacing a damaged driver

You can also use Apple HD SC Setup's Update command to replace a damaged driver without erasing your disk. If your disk is initialized with a version of Setup earlier than 2.0, use that version to replace the driver. Later versions won't work.

After you have properly connected and initialized your hard disk, if the Hard Disk SC icon doesn't appear on the Macintosh Finder desktop when you start up your machine, follow these steps:

1. **Check that the hard disk is switched on.**

   If you have two or more Hard Disk SC's connected to your Macintosh, be sure to switch both on and leave them on for at least 10 seconds before you switch on your Macintosh.

2. **If you can't start up using the hard disk as a startup disk, replace its System Folder.**

   Restart the computer from another disk. Copy an undamaged version of the System Folder onto the problem hard disk.

▲ Warning When you replace a System Folder, all of the files it contains are erased, so be sure to replace it with a copy containing the same fonts, desk accessories, and software for peripheral devices. For this reason, you should keep a copy of your System Folder on a backup disk. ▲

3. **If the Hard Disk SC icon still doesn't appear on the Macintosh Finder desktop, replace the driver.**

   When Setup opens from your *Utilities* disk 1, click Update. Make sure that the SCSI device number in the dialog box matches the priority number of the disk that is not working correctly. If the SCSI device number does not show up in the dialog box, there may be a problem with your hard disk hardware. Contact your authorized Apple dealer.

4. **When Setup notifies you that the driver has been updated, click Quit to exit from Setup.**

Testing your hard disk with Setup

You can use Apple HD SC Setup to tell you whether or not the hard disk is functioning properly. (The Test routine checks the hardware only; it can't tell you anything about software problems.) A failure means something isn't working properly—even though you may not notice anything wrong. You may want to run the test every month or so to avoid unexpected loss of data.

The test takes several minutes. The exact length of time depends upon the size of your hard disk and your type of Macintosh.

Testing does not affect the data currently stored on the disk. To run the test:

1. **Insert your *Utilities* disk 1 and switch on your Macintosh.**

   Be sure your hard disk is on.

2. **Open Apple HD SC Setup by double-clicking its icon.**

   Make sure the SCSI device number matches the ID number of the disk drive that you want to test. If it does not, click Drive until the device number and the ID number match.

3. **Click Test.**

   A dialog box tells you that testing will take several minutes and cannot be interrupted.

4. **Click OK to continue.**

   When the test is complete, a message tells you whether the hard disk passed or failed. If it fails, have your Hard Disk SC checked by an authorized Apple dealer.

   ❖ *Note:* You can also keep a copy of Apple HD SC Setup on your hard disk for testing purposes. Just open it and click Test. Do not, however, attempt to initialize, update, or partition the hard disk containing the Setup program.

5. **Click Quit to exit from Setup.**

Creating partitions

This section explains how to use versions 2.0 and later of Apple HD SC Setup to create partitions on your hard disk. You need to create partitions if you plan to use portions of your hard disk with other (non-Macintosh) **operating systems,** such as A/UX®, Apple's version of the AT&T UNIX® system for the Macintosh.

An **operating system** is a program that organizes the actions of the parts of the computer and its peripheral devices.

If you don't need to create partitions, skip this section for now.

△ **Important** Whenever you partition a disk for the first time, and in many cases when you repartition your disk, Setup must erase all the information stored on your disk. Be sure to back up all files that you need before attempting to create partitions. △

Standard partitions

Apple HD SC Setup allows you to partition your entire SCSI hard disk according to any one of four standard schemes by following this simple procedure. Setup automatically removes old partitions when creating new standard partitions.

1. **Start your Macintosh using your *Utilities* disk 1 as the startup disk.**

2. **Open Setup by selecting its icon and choosing Open from the File menu, or by double-clicking the icon.**

   The main Apple HD SC Setup dialog box appears, as shown earlier in Figure 1-1.

△ **Important** If you have two or more Hard Disk SC's connected, make sure that the SCSI device number matches the SCSI ID indicator number of the hard disk you wish to partition. If they do not match, click Drive until they do. △

3. Click Partition.

The Partition dialog box appears. Check to see that the correct disk is shown on the right. (See Figure 1-2.)

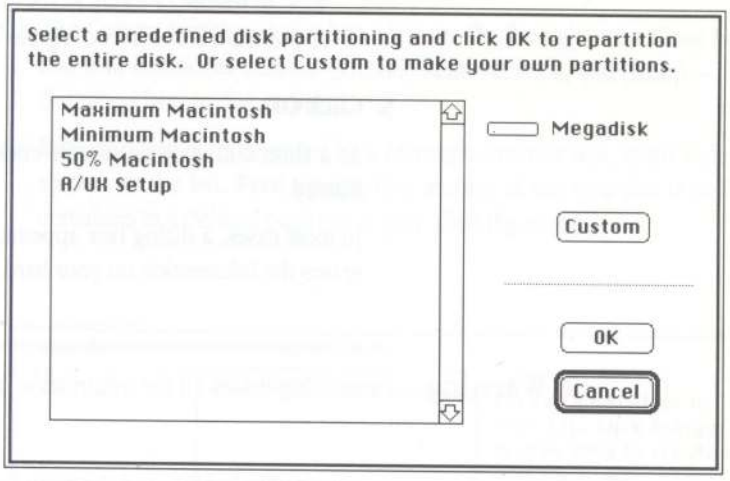


Figure 1-2
The Partition dialog box

4. Select the standard partitioning scheme that you want.

There are four standard partition schemes:

- Maximum Macintosh. This is the same partition scheme that you created when you first initialized your hard disk. The driver is always in a partition separate from the Macintosh **volume.** Use this scheme if your disk has been partitioned some other way, and you wish to use essentially all of your hard disk as a Macintosh volume.
- Minimum Macintosh. No matter what size your hard disk, this scheme allots about two megabytes of disk space to your Macintosh volume so you can use it as your startup disk. You can copy your System Folder and utilities into this volume. (See "Creating a Startup Hard Disk," earlier in this chapter.) You'll need files establishing another operating system to make use of the remainder of the disk.

Volume is a general term referring to a storage device: a source of or a destination for information.

- 50% Macintosh. This scheme creates a Macintosh volume using about half your disk space, and it sets aside the other half for future use with another operating system.
- A/UX Setup. This scheme creates a minimum Macintosh volume, for startup, and other partitions so you can use the Apple Tape Backup 40SC to restore or install A/UX files. You need an Apple Hard Disk 80SC and version 2.0 or later of Apple Tape Backup 40SC to use this scheme.

5. **Click OK.**

   As a short cut, you can double-click the partition scheme that you want instead.

   In most cases, a dialog box appears, reminding you that partitioning erases the information on your hard disk. To continue, click OK.

▲ Warning Partitioning erases all the information on your hard disk. ▲

   Partitioning begins, and the main Setup dialog box appears, with status messages at the bottom. Setup tells you when partitioning is completed.

   Partitioning takes much less time than initializing.

   If you click Cancel, you return to the main Setup dialog box, but no partitioning takes place.

6. **Click Quit to return to the desktop.**

   Your Macintosh volume is still shown, but it no longer takes up most of the disk, unless you selected the Maximum Macintosh partition scheme.

Custom partitions

If you have a special requirement for a partition scheme other than those described above, you can use Apple HD SC Setup to create custom partitions on your hard disk. Since few users have such a need, you may wish to skip the remainder of this chapter.

Adding a custom partition merely assigns disk space. Frequently, however, you must erase or move information—that is, remove, group, or move existing partitions—before you create a new partition.

To add a partition

Begin by following the first three steps described in "Standard Partitions," earlier in this section. Then follow these steps.

1. Click Custom in the Partition dialog box.

The Custom Partition dialog box appears. On the right are a Done button and four functional buttons—Details, Remove, Lock, and Group—described later in this section.

Each partition is represented by a rectangle, with its size, in kilobytes shown on the left. **Free space,** that portion of the disk that is not contained in a defined partition, is gray. (See Figure 1-3.)

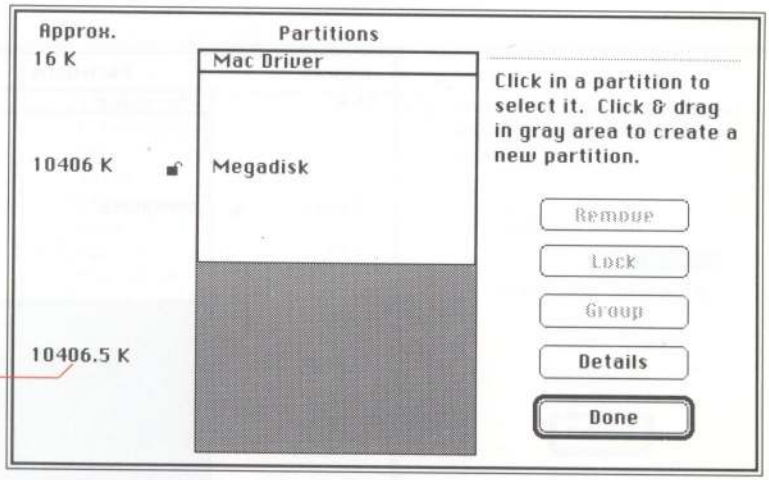


Figure 1-3
The Custom Partition dialog box

There must be a section of free space large enough to hold your new partition.

If there is not sufficient free space, remove one or more partitions. For example, if you've just initialized your disk, you'll need to remove your Macintosh partition. (See "To Remove a Partition," later in this section.)

If the free space is divided into sections by existings partitions, with no single section large enough to hold your new partition, you need to remove a partition or combine the sections of free space by grouping the partitions. (See "To Group Partitions," later in this section.)

Done returns Setup to the main dialog box.

2. **Move the mouse to place the pointer in a gray rectangle representing free space, and press the mouse button.**

   As shown in Figure 1-4, Setup draws two brackets representing the new partition. If you place the pointer in the upper half of the free space rectangle, the brackets start at the top of the free space; if you place the pointer in the lower half of the free space rectangle, the brackets start at the bottom of the free space.

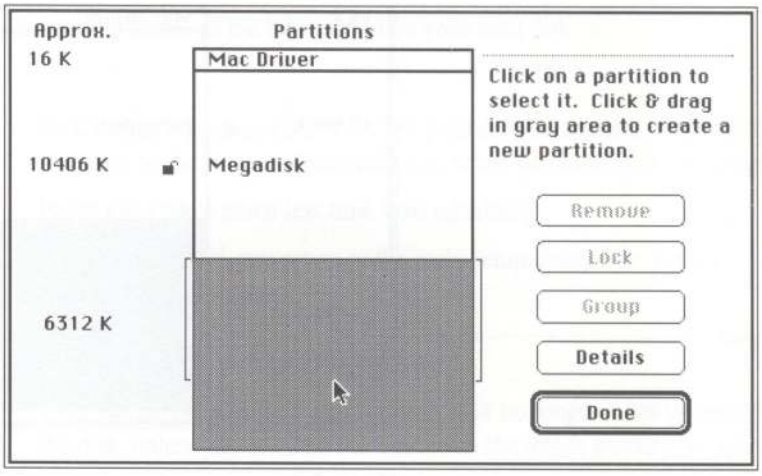


Figure 1-4
Creating a custom partition

3. **Drag the pointer up or down (holding the mouse button down), to adjust the size of the new partition.**

   If you move the pointer to the left or right of the rectangle, the brackets disappear.

   The size, in kilobytes, is shown on the left.

4. **Release the mouse when you are satisfied with the size of the new partition.**

   You don't need to be exact. You still have a chance to change it.

   Apple HD SC Setup immediately presents the Partition Type dialog box. (See Figure 1-5.) You use the left side to select a partition type for the custom partition you are creating. You use the right side to adjust its size.

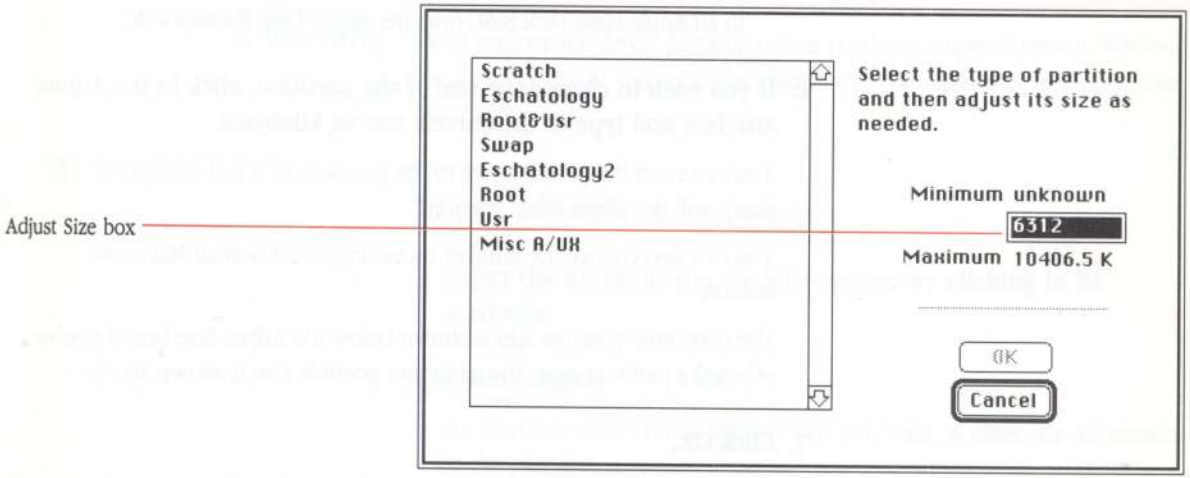


Figure 1-5
The Partition Type dialog box

5. **Select the partition type by clicking in the list on the left.**

   You have up to ten choices:

   - The Driver. If your hard disk already contains a driver partition, then this partition type is not listed. (It's not shown in Figure 1-5.)
   - Macintosh Volume. This represents the Macintosh hierarchical file system that you use on your hard disk even when you don't create partitions. If there is already a Macintosh partition on your hard disk, then it isn't listed. (It's not shown in Figure 1-5.)
   - Scratch. Scratch is disk space that you don't normally use while working in your Macintosh operating system, but which some programs—non-Macintosh as well as Macintosh—may request for use as temporary storage.
   - A/UX. There are seven additional partition types, shown in Figure 1-5, that can be used when backing up or restoring the A/UX environment to an Apple Hard Disk 80SC from the Apple Tape Backup 40SC.

6. **If you wish to change the size of the partition, click in the Adjust Size box and type in the correct size in kilobytes.**

   You can enter the partition size to the precision of a half-kilobyte (0.5 K). Setup will not allow other fractions.

   You can also change the number by editing in the normal Macintosh fashion.

   The maximum possible size is shown below the Adjust Size box; if you've selected a partition type, the minimum possible size is shown above.

7. **Click OK.**

   Apple HD SC Setup creates the new partition and again presents the Custom Partition dialog box, where the new partition is shown.

   You can create another custom partition as long as you have sufficient free space, but you can only select a listed partition type.

   Click Cancel in the Partition Type dialog box if you wish to return to the Custom Partition dialog box without creating a new partition.

8. **Click Done in the Custom Partition dialog box to return to the main Setup dialog box.**

9. **Click Quit to return to the desktop.**

   Your Macintosh volume is shown, represented by a hard disk icon. When you open the window representing the hard disk, its new size is displayed just below the title bar, if you are using the By Icon view.

To remove a partition

You remove existing partitions to make space for new custom partitions. Working in the Custom Partition dialog box, you can remove any partition from your hard disk.

▲ Warning Don't remove the driver partition unless you have a special reason. Without the driver partition you won't be able to use your disk after restarting your Macintosh. ▲

To remove a partition, follow these steps:

1. **Select the partition you wish to remove by clicking in its rectangle.**

2. **Click Remove.**

   An alert box asks you to confirm that you want to erase the information in the partition.

▲ Warning Removing a partition erases all information in the partition. ▲

3. **Click OK.**

   Click Cancel if you decide not to remove the partition.

   When a partition is removed, the space it occupied becomes gray to represent free space. If another area of free space is adjacent, the two gray areas are combined.

To group partitions

Grouping partitions combines the free space on your disk. It's like sliding books together so you can place a stereo on your bookshelf. The procedure is simple:

1. **Working in the Custom Partition dialog box, click Group.**

   Setup presents an alert box, warning that it will take time to move information from one portion of your disk to another. Because grouping usually means that a large amount of information is being moved, Setup also warns that some might be lost.

2. **Click OK.**

   All partitions are grouped together on the disk, and they are shown together at the top of the Custom Partition display.

   Click Cancel if you decide not to group the partitions.

To move a partition

You can also use the mouse to move a partition into adjacent free space or into any free space larger than the partition. Follow these steps.

1. **Working in the Custom Partition dialog box, select the partition.**

2. **Holding down the mouse button, drag the partition to its new position.**

   Setup won't let you move a partition "just a little bit" into an adjacent free space. You must drag it more than half way.

   When you release the mouse button, Setup presents an alert box, warning that it will take time to move information from one portion of your disk to another. Setup also warns that some information might be lost in the process.

3. **Click OK to confirm.**

   Click Cancel if you decide not to move the partition.

To lock a partition

While your Macintosh partition is locked you cannot alter or erase the information it contains, but you can still read the information. To lock the Macintosh partition, follow these steps:

1. **Working in the Custom Partition dialog box, select the Macintosh partition by clicking in its rectangle.**

2. **Click the Lock button.**

   This is just like sliding the locking tab on a 3.5-inch disk. In some cases Setup warns that the partition will not be locked until you next restart your Macintosh.

   When the partition is locked, the lock icon to the left of the rectangle is closed. The Unlock button replaces the Lock button.

   Click Unlock to unlock the Macintosh partition, after selecting it.

To view your partitions

You can also use Apple HD SC Setup to display a list of partitions on your hard disk. Follow this simple procedure:

1. **Working in the Custom Partition dialog box, click the Details button.**

   The Details window (shown in Figure 1-6) appears. It shows each partition, its name, type, size in kilobytes, and the block where the partition begins on the disk. At the bottom of the window, the total disk capacity is displayed.

   The Details window shows one more type of partition, the partition map, which contains information about the partitions on the disk. You cannot directly change the partition map, and it takes up a very small portion of the disk.

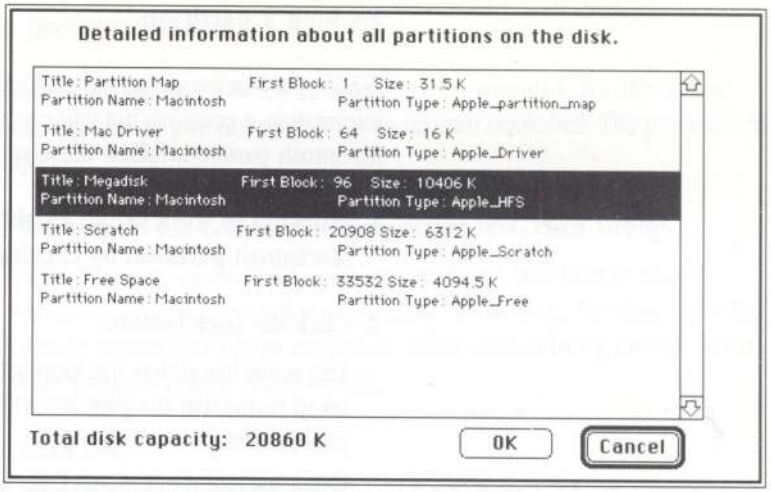

Detailed information about all partitions on the disk.
Title: Partition Map First Block: 1 Size: 31.5 K
Partition Name: Macintosh Partition Type: Apple_partition_map
Title: Mac Driver First Block: 64 Size: 16 K
Partition Name: Macintosh Partition Type: Apple_Driver
Title: Megadisk First Block: 96 Size: 10406 K
Partition Name: Macintosh Partition Type: Apple_HFS
Title: Scratch First Block: 20908 Size: 6312 K
Partition Name: Macintosh Partition Type: Apple_Scratch
Title: Free Space First Block: 33532 Size: 4094.5 K
Partition Name: Macintosh Partition Type: Apple_Free
Total disk capacity: 20860 K
OK
Cancel

Figure 1-6
The Details window with highlighted partition

If you select a partition before clicking Details, that partition is highlighted in the Details window. If you select a partition in the Details window by clicking one of its lines, the partition is highlighted when you return to the Custom Partition dialog box. You can't select the partition map.

2. **Click OK to close the Details window and return to the Custom Partition dialog box.**

CHAPTER 2

HD Backup

THE APPLICATION HD BACKUP, FOUND ON YOUR *UTILITIES* DISK 1, LETS YOU protect the contents of your hard disk by making backup copies of your files on 3.5-inch disks and, if necessary, by restoring those files onto the hard disk.

One of the hardest lessons any computer user learns is that it is important to make copies of files in case data or programs are damaged by malfunctioning hardware, faulty software, human error, external intervention (such as an exploring three-year-old), or mysterious events beyond rational explanation.

Approaches to backing up your hard disk

When you are using only 3.5-inch disks, it is relatively quick and easy to copy files or even entire disks onto backup disks and recopy them should the need arise. When working with a hard disk with 20 megabytes or more of storage, however, reconstructing your entire disk may be difficult. If you share that disk with other users, putting your files back together again may be impossible without the aid of a backup utility such as HD Backup.

To protect the contents of your disk, you need to copy the entire contents of your hard disk onto several 3.5-inch disks. This is called a **global backup.** It is generally time-consuming.

At the end of each work day or some other regular period, you need to back up your disk again. However, since you probably use only a fraction of your disk during any work session, you need copy only the documents that you've modified or created recently. This procedure is called an **incremental backup.**

In each incremental backup, you copy onto 3.5-inch disks all files that you have created, modified, or copied onto your hard disk *since the last global backup.* Thus, each time you complete an incremental backup, you create a new stack of incremental backup disks. You can back up onto your old stack of incremental backup disks or set it aside for your next backup.

With each incremental backup you increase the amount of information stored on your incremental backup disks. When that stack roughly equals half your stack of global backup disks, you probably should do another global backup. Then you can start all over again with your incremental backups.

When working with an important document, you may also want to copy it onto a 3.5-inch disk whenever you save it. You can accomplish this easily with the Save As command, unless it is too large to fit on one of the disks. In that case, you need to use the "Back up a single file" option of HD Backup.

If you lose the entire contents of your hard disk, you can restore it by erasing the hard disk and then copying all the global backup disks back onto the hard disk. Then, you can bring it up to date by copying the incremental backup disks onto the hard disk.

If you lose a single file, you can restore it to the hard disk from one of your backup disks without copying the entire collection of backup disks.

Backing up files

Before you use HD Backup for the first time, it makes sense to copy it onto your hard disk. Keep the original or another copy handy, however, since you can't use the hard-disk copy to restore the contents of that disk if it is damaged.

▲ Warning HD Backup does not copy certain files with filenames that begin with a period. To avoid problems, make sure that you rename all such files (so that they don't begin with a period) before running HD Backup. ▲

Be sure to collect enough 3.5-inch disks to complete both a global backup and successive incremental backups. It can take as many as twenty-five 800K (double-sided) disks to back up an entire 20-megabyte hard disk and about half as many—up to twelve or thirteen—for the largest incremental backup. You may even wish to use two different sets of global backup disks and two sets of incremental backup disks, alternating them in case your machine fails *during* a backup.

▲ Warning HD Backup erases all information previously stored on your backup disks, so make sure that none of them contain documents or programs that you need. ▲

Global backup

To carry out a global backup:

1. **Open the HD Backup application by double-clicking its icon.**

   You can also select HD Backup and choose Open from the File menu.

   A dialog box appears, instructing you to select a function and a volume. **Volume** is a general term referring to a storage device. In HD Backup, it means your hard disk in nearly all situations, but it can apply to any Macintosh storage device except 3.5-inch disks.

   To the right of each hard disk listed, HD Backup shows the amount of disk space in use, in kilobytes.

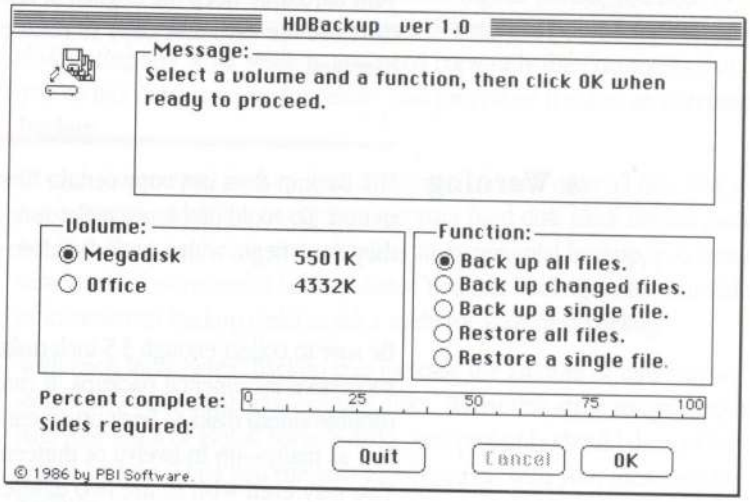


Figure 2-1
The HD Backup dialog box

2. **Click the Volume button in the left column corresponding to the hard disk that you wish to copy.**

   If you have only one hard disk, it is automatically selected.

   If you have more than five hard disks hooked up to your system, the disk you wish to back up may not be listed. In that case, return to the Finder and drag to the Trash the icon representing one of the listed hard disks. Then switch off the disk drive. Continue until the disk you want appears in the HD Backup window. (Be sure you don't shut down your startup disk or the disk you are using to run HD Backup.)

3. **Select the "Back up all files" function in the right column, and click OK.**

   HD Backup automatically ejects any disk found in your 3.5-inch disk drives.

   In the lower left, HD Backup reports how many disk sides (400K each) are required to complete the backup.

4. **When instructed by the dialog box, insert the first disk from your global backup stack into one of your 3.5-inch disk drives.**

   If the disk is unreadable, the program asks you to eject it or initialize it as one-sided or two-sided. Click the appropriate button.

   You can reinitialize a readable disk by holding down the Option key as you insert the disk. While this is generally unnecessary, you may do it, for example, to reinitialize at 800K a double-sided disk that was initialized at 400K.

HD Backup automatically names each disk with a number and the name of the hard disk being backed up. The first backup disk for a volume named Megadisk is always 1.Megadisk, followed by 2.Megadisk, and so on.

HD Backup always reports when it's waiting, initializing a disk, verifying a disk, or backing up files. It displays the name of each file as it is copied.

As each disk is filled, HD Backup ejects it and requests the next one. A black line moves across the "Percent complete" bar at the bottom of the window, indicating the percentage of the global backup that is completed. In addition, HD Backup subtracts one or two from the "Sides required" display, depending upon the size of the disk just ejected.

Click Cancel to halt the backup at any point. If you cancel, you cannot restore files from the backup disks that you have already created. You can either click Quit to exit from HD Backup or proceed again by selecting the volume and function and clicking OK.

5. **Label the disk with its assigned name as well as the date.**

6. **Insert the next disk.**

   If you insert any of the disks that you have just copied files onto, HD Backup ejects it and requests another.

   ❖ *User's tip:* If you have more than one 3.5-inch disk drive, you can save yourself a little work by inserting disks into all drives at once. HD Backup copies onto the disks in the order of their priority. (If you have internal and external 3.5-inch drives, the internal drive always has the higher priority. If you have two internal drives, the lower drive or the drive on the right has the higher priority.)

   Label each disk and insert another one, as requested by the dialog box.

7. **When HD Backup reports that the backup is complete, click OK and then click Quit to exit from the program.**

8. **Label your backup stack and store it in a safe but accessible place.**

Incremental backup

The procedure for an incremental backup is similar to the global backup sequence described above:

1. **Open HD Backup.**

2. **Select the correct volume.**

3. **Select the "Back up changed files" function and click OK.**

   Any document or file that has been created, modified, or moved to the hard disk since the last global backup is copied.

   Some applications, such as MacWrite, actually change when they are opened, so files may unexpectedly end up on your incremental backup.

△ Important

Incorrect dates are recorded whenever you create or modify a document while the Macintosh clock is set on the wrong date. Any document that has an incorrect Date Created or Date Modified, recorded as a future date, is copied every time you run "Back up changed files." From the Finder, you can select a document and choose Get Info from the File menu to check the dates. If the problem is only with the Date Modified, you can reset it by saving a minor modification to the document. △

   When you select "Back up changed files," HD Backup does not display "Sides required," but the "Percent complete" bar shows the percentage of a full backup that you've completed.

4. **When HD Backup is ready, insert the first disk from your incremental backup stack into a 3.5-inch disk drive.**

   If you have more than one 3.5-inch disk drive, you can insert more than one disk at a time.

   HD Backup names each disk by adding a number after the name of the hard disk. That is, the first incremental backup disk for a volume called Megadisk is Megadisk.1, the second is Megadisk.2, and so on.

   If you click Cancel, you cannot restore files from the backup disks that you have already created.

5. **As each disk is ejected, label the disk with its assigned name as well as the date, and insert the next disk.**

   Repeat as often as necessary.

6. **When HD Backup reports that the backup is complete, click OK and then click Quit to exit from the program.**

   When the "Percent complete" bar shows more than 50 percent at the completion of an incremental backup, it's time to do another global backup.

7. **Label your backup stack and store it in a safe but accessible place.**

Copying large files

By specifying the "Back up a single file" function of HD Backup, you can copy a file too large to be copied with the Finder.

1. **Open HD Backup.**

2. **Select the volume containing the file you wish to copy.**

3. **Select the "Back up a single file" function and click OK.**

   A dialog box appears, similar to those that appear when opening documents from an application.

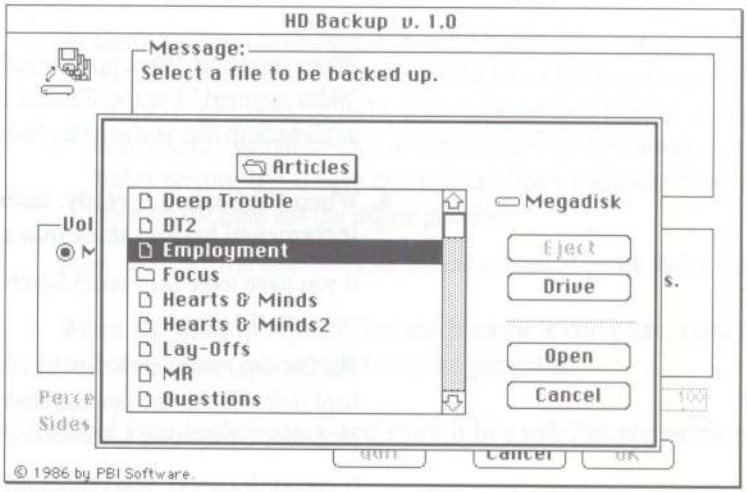


Figure 2-2
"Back up a single file" dialog box

4. **Use the dialog box to locate the file you want to copy.**

   See the Appendix, "Moving Through the File System," or your Macintosh *System Software User's Guide* to learn how to use a directory dialog box to locate files.

5. **Select the name of the file you want to copy and click Open (or double-click the filename).**

   HD Backup asks you to insert a disk.

6. **Insert the first backup disk or, if you have more than one 3.5-inch disk drive, insert disks into each.**

   Neither "Sides required" nor the "Percent complete" bar operates with the "Back up a single file" function.

   HD Backup names each disk as if it were doing a global backup, placing a number before the hard disk name.

   If you click Cancel, you cannot restore files from your backup disks.

7. **As each disk is ejected, label its assigned name as well as the date, and insert the next disk.**

   Repeat as often as necessary.

8. **When HD Backup reports that the backup is complete, click OK and then click Quit to exit from the program.**

   Since the "Back up a single file" feature uses the same naming procedure as "Back up all files," you should label these disks to distinguish them from those in your global backup stack.

9. **Store your backup disks in a safe but accessible place.**

Restoring files

Use HD Backup to copy your files from your backup disks to any hard disk. Files and filenames on backup disks differ from those on disks created using the Finder, so you can introduce errors by using the Finder to restore your files. (See the section "When Your Restoration Fails" later on for instructions on using the Finder when you are unable to use HD Backup to reconstruct the contents of your hard disk.)

HD Backup shows icons for all copied files, even if the directory from which they were copied is arranged by another view (using the View menu in the Finder).

During Backup, HD Backup changes filenames that appear more than once on your hard disk (in separate folders). For example, two files named Dear John become Dear John.1 and Dear John.2.

Icon for a split file

HD Backup packs your files into every available sector of disk space, so some files are split into two pieces (or more, in the case of very large files) and renamed. For example, if your file called Poem is being copied onto a disk when the disk becomes full, that piece is renamed 1.Poem. The first file on the next disk is 2.Poem. (The split files also have distinctive icons, a sample of which is shown here, so you can tell they're incomplete.)

Restoring a single file

Use HD Backup to restore a single file from your backup disks to your hard disk without erasing or reorganizing the hard disk.

1. **Open HD Backup.**
2. **If you have more than one hard disk connected, select the correct volume.**
3. **Select "Restore a single file" and click OK.**

   HD Backup ejects any 3.5-inch disks in your machine and asks for a backup disk.

4. **Insert one of your backup disks.**

   You can restore files from any disk created with HD Backup's three backup functions.

   HD Backup presents a dialog box containing a file directory for your backup disk, as well as buttons for ejecting disks, switching drives, opening a file, or canceling the Restore command. Every file and piece of a file on that disk is shown, in numerical and alphabetical order. Folders, however, are not displayed.

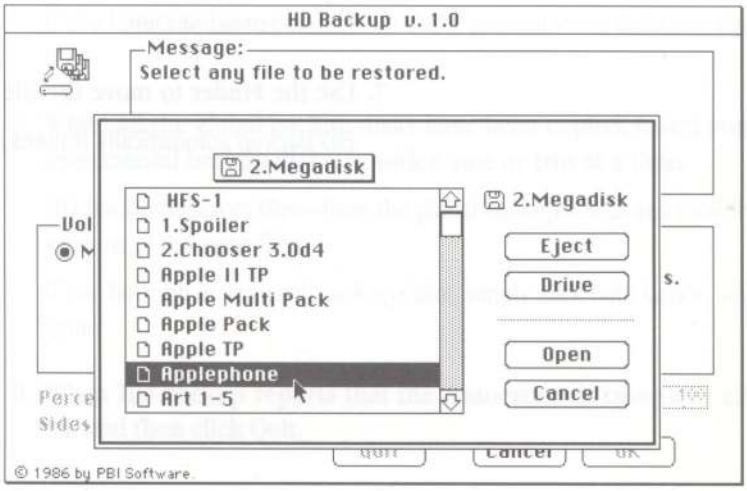


Figure 2-3
"Restore a single file" dialog box

Look in the file directory, scrolling if necessary, for the file that you wish to restore.

If the file you are searching for is not on the disk, click the Eject or Drive button and insert another disk. Repeat the search until you locate the file.

If, in the course of locating a file, you notice the placement of other files that you think you may wish to restore later, note them on the disk label.

5. **Select the name of the file you wish to copy, and click Open.**

   You can also double-click the filename in the directory.

   If HD Backup split the file into two or more pieces, find, select, and open the first piece. (Remember, the first piece of a file called Poem is named 1.Poem.)

   When the first piece is copied, HD Backup asks for the disk containing the second piece. As soon as you insert that disk, HD Backup automatically continues the restoration.

   If your file is large enough to be spread onto three or more disks, repeat as often as necessary.

6. **When the restoration is complete, click OK and then click Quit to return to the Finder.**

   If you wish to restore another file or to back up files, click a function button instead of Quit.

7. **Use the Finder to move the file to the proper folder.**

   HD Backup automatically restores a single file to the hard disk window.

Restoring all files

Replacing the entire contents of a hard disk takes time, so you should be sure that the contents of your disk are seriously damaged before using "Restore all files."

1. **Start up your Macintosh from a 3.5-inch disk (or a hard disk other than the one you are reconstructing).**

2. **Open HD Backup from a 3.5-inch disk (or another hard disk).**

3. **If necessary, click the Volume button for the hard disk onto which you wish to restore your files.**

4. **Select "Restore all files" and click OK.**

   HD Backup warns you that it erases the selected hard disk.

5. **Click OK if you wish to continue.**

   If you don't want to erase the disk, click Cancel instead.

   The dialog box requests that you insert your disks, naming them in order.

6. **Insert your global backup disks.**

   HD Backup ejects disks inserted in the wrong order or not belonging to the right set of backup disks.

   If you have more than one 3.5-inch drive, you can insert disks into each one.

7. **When all the global backup disks have been copied, insert your incremental backup disks, in order, one or two at a time.**

   HD Backup replaces files—from the global backup—with any modified versions of the same files.

   If you have no incremental backup disks, simply click both Cancel and Quit.

8. **When HD Backup reports that the restoration is complete, click OK and then click Quit.**

When your restoration fails

If you are unable to restore all the files to your hard disk with "Restore all files," but you still have your backup disks, you may be able to salvage much of the contents of your disk. This procedure does not reconstruct your folders, however, and it should be used only if all else fails.

1. **Use the Finder to copy files that are not split from your backup disks to your hard disk.**
2. **Use "Restore a single file" to copy onto the hard disk files that are split onto more than one backup disk.**

CHAPTER 3

Disk First Aid

DISK FIRST AID™ IS AN APPLICATION PROGRAM, FOUND ON YOUR *UTILITIES* disk 1, that allows you to make minor repairs to a damaged disk. You can use Disk First Aid when you have a disk emergency—that is, when your disk appears unreadable—or for preventive maintenance.

Preparing a Disk First Aid disk

For Disk First Aid to work properly in all cases, you should prepare a disk ahead of time, with Disk First Aid set as the startup application.

1. **Copy your System Folder and Disk First Aid onto a 3.5-inch disk that you plan to set aside as your Disk First Aid disk.**

   You can make your *Utilities* disk 1 the Disk First Aid disk by carrying out the next step, but that might make it harder to use the other *Utilities* disk 1 application programs.

2. **Select Disk First Aid (in the window representing the Disk First Aid disk) and choose Set Startup from the Special menu.**

   If for some reason you need to undo the Set Startup command, select the Finder icon (in the System Folder) and choose Set Startup again.

3. **Store your Disk First Aid disk in a spot where you can find it in a disk emergency.**

When to use Disk First Aid

Disk First Aid is a program designed to help you regain the use of any disk that uses the Macintosh hierarchical file system—that is, a hard disk or double-sided (800K) disk—without losing the information and programs stored there.

It requires two steps. First, it examines, or verifies, your disk. Second, it repairs damaged data structures. Data structures organize the various files and documents on the disk.

You know that you need to run Disk First Aid when you see a worrisome error message telling you a disk is damaged and asking whether you want to initialize it. Less frequently, you might see a message asserting that a disk is not a Macintosh disk. Such messages might be caused by a power interruption or by an application program that causes a system failure.

In addition, if most of your available disk space disappears following a power outage, you may wish to run Disk First Aid, even if you have no other problems with your disk.

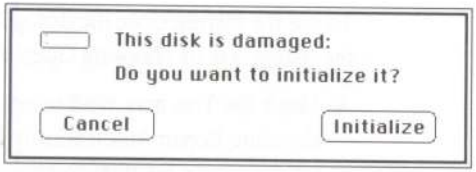


Figure 3-1
This is when you need Disk First Aid

If, after you've used Disk First Aid, you still have problems with your disk, you may need to reinitialize it and reconstruct your files from backup disks. This is a last resort. Run Disk First Aid first, particularly when you're having problems with a hard disk.

- *Note:* If you cannot start up your Macintosh using the hard disk as the startup disk, the problem is likely with the System file, not the disk data structures. In such cases, you should use another startup disk and copy the System file onto the hard disk again. If you normally use an internal hard disk as the startup disk, and you are unable to start up your Macintosh, you can instruct the computer to ignore the internal hard disk and look for another startup disk by pressing the Command, Option, Shift, and Delete keys (four keys) at the same time.

Examining or repairing your hard disk

Follow these steps to examine or repair your hard disk:

1. **Start up with your Disk First Aid disk as the current startup disk.**

   Your system automatically opens Disk First Aid and presents a dialog box.

   If you haven't set up a disk where Disk First Aid is the startup application, you can attempt to open Disk First Aid from the Finder. It should work in most, but not all, cases.

   To use the menus, close the dialog box by clicking Cancel. You can reopen the dialog box by choosing Open Volume from the File menu.

   ❖ *User's tip:* You may wish to set Disk First Aid for automatic repair by choosing Repair Automatically from the Options menu. (You can turn off the option by choosing it again.)

2. **Open the disk volume—in this case the hard disk—you want to examine or repair.**

   You can move to a volume by clicking Drive (or pressing Tab) until its name appears in the dialog box, and then click Open (or press Return).

   If you cannot find the volume, the hard disk itself may be damaged or malfunctioning. Contact your authorized Apple dealer.

   If somehow you open the startup disk or the disk from which you are running Disk First Aid, Disk First Aid tells you that it can examine the disk but not repair or erase it. Click Cancel if you wish to open another volume.

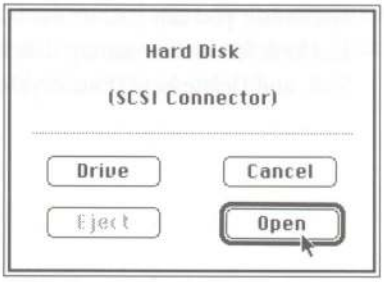


Figure 3-2
Opening the volume Hard Disk

3. **To examine the open volume, click the Start button.**

Once you have started, you can stop or pause the process by clicking the appropriate button. If you click Stop, Disk First Aid asks if you really wish to stop (by clicking OK) or to continue (by clicking Cancel or pressing Return).

After you click the Pause button, you have the option of clicking Resume.

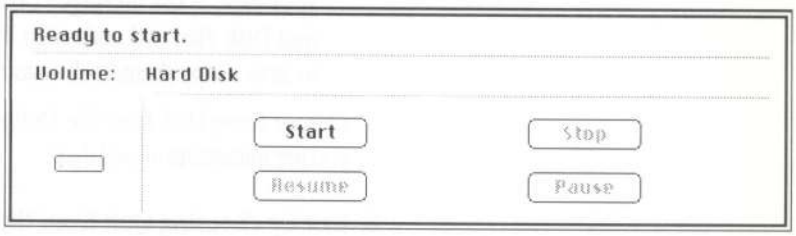


Figure 3-3
Examining the volume Hard Disk

Once the volume Hard Disk is examined, the screen displays one of these three messages:

- `Finished. No repair necessary.`
- `The disk "Hard Disk" needs to be repaired. Do you want me to do this?`

This message does not appear if you have chosen Repair Automatically from the Options menu. In that case, Disk First Aid simply reports when it has completed the repair.

- `Unable to verify status of disk.`

4. **To repair a disk with minor damage (see the second message above), click Repair.**

As a short cut, you can press Return.

Disk First Aid reports when the repair is completed.

If Disk First Aid cannot completely repair your disk, it reports that it is unable to complete the repair.

5. **If your disk is damaged beyond repair, reinitialize your disk or contact your authorized Apple dealer for other suggestions.**

   You know that the disk is damaged beyond repair if a message appears reporting that the status of the disk can't be verified or that repair can't be completed.

   ❖ *Note:* If you are running Disk First Aid for preventive maintenance—that is, without an error message described above in "When to Run Disk First Aid"—you might be able to save your files before erasing your disk. If the message "Unable to verify status of disk" appears, quit Disk First Aid and try to make copies of any files that you want to save. Copy them back onto the disk after you initialize it.

   Choose Erase Disk from the Options menu. Click the Initialize button if you are initializing a hard disk.

6. **Exit by choosing Quit from the File menu.**

   If you wish instead to examine another volume, choose Close and then Open Volume from the File menu.

Examining or repairing your 3.5-inch disk

If you have more than one disk drive, you can also use Disk First Aid to examine or repair an 800K disk—that is, a double-sided 3.5-inch disk. Follow the steps described above for a hard disk, with the following differences:

- If you have only one 3.5-inch disk drive, you need to use your hard disk as the Disk First Aid disk. Make sure it contains a System Folder and a copy of Disk First Aid.
- When opening the disk volume (step 2 earlier), you can eject a 3.5-inch disk by pressing the the Eject button. Then insert the damaged disk.
- Disk First Aid inspects and attempts to repair a double-sided disk even if you can't show it on the desktop.
- When you choose Erase Disk from the Options menu (in step 5 earlier), click Two-Sided if you want your reinitialized disk to use the hierarchical file system.

Font/DA Mover

FONT/DA MOVER IS AN APPLICATION PROGRAM THAT ALLOWS YOU TO ADD OR remove fonts and desk accessories from any System file. It is found in the Font/DA Mover Folder on your *Macintosh Utilities* disk 2.

About fonts and desk accessories

Fonts and desk accessories are contained in your startup disks' System files. **Fonts** are the typefaces and type sizes that can be used by the Macintosh and its application programs. Desk accessories are mini-applications that you can open from the Apple menu. The fonts and desk accessories that you can work with depend upon which startup disk—that is, which System file—your Macintosh is currently using. This **current startup disk** is usually shown in the upper-right corner of your desktop. For a more complete discussion of startup disks and current startup disks, see your *Macintosh System Software User's Guide.*

- *Note:* Each type size for a font is stored and listed separately. Thus, when this manual describes copying or removing a font, it is referring to a specific size of a font, such as Geneva 10.

Other fonts and desk accessories, as well as those stored in the startup System file, can be stored in other System files or in special font files and desk accessory files. The font file in the Font/DA Mover Folder on your *Macintosh Utilities* disk 2, for example, contains several fonts. Find File is stored in the desk accessory file found in the same Font/DA Mover Folder.

A font file

A desk accessory file

Figure 4-1
Icons representing font and desk accessory files

You can use Font/DA Mover to copy fonts and desk accessories to and from any System file, including the current startup System file.

You can also copy fonts to or from a font file and desk accessories to or from a desk accessory file. In fact, you can use Font/DA Mover to create font and desk accessory files.

If you consider your System file too large, you can use Font/DA Mover to remove fonts and desk accessories. If you don't have them backed up elsewhere, however, it makes sense to copy them to another disk instead.

Like other applications, Font/DA Mover can be copied to and opened from almost any disk.

Moving fonts and desk accessories

Font/DA Mover works the same for both fonts and desk accessories. You are likely, however, to want to move only one desk accessory at a time, while you probably need to copy several fonts—such as a family of different sizes of the same font—at once.

△ **Important** To be sure that Font/DA Mover works properly, turn off MultiFinder before removing fonts or desk accessories, or copying a large number of fonts.

To turn off MultiFinder, choose Set Startup from the Special menu. Click the Finder button and then OK in the dialog box that appears, and restart your Macintosh. △

When MultiFinder is turned on, you can't use Font/DA Mover to remove fonts from the System file of your startup disk or to remove or replace an open desk accessory. Furthermore, if you leave MultiFinder on, there might not be enough memory available to move a large number of fonts. You can, however, use Font/DA Mover with MultiFinder to install fonts and desk accessories.

1. **Select the Font/DA Mover icon and choose Open from the File menu, or just double-click the icon.**

   The Font/DA Mover dialog appears, with the Font button selected at the top. Listed on the left are the fonts included in the current startup System file.

   You can hold down the Option key while opening Font/DA Mover to select the Desk Accessory button and show the desk accessories in the current startup System file.

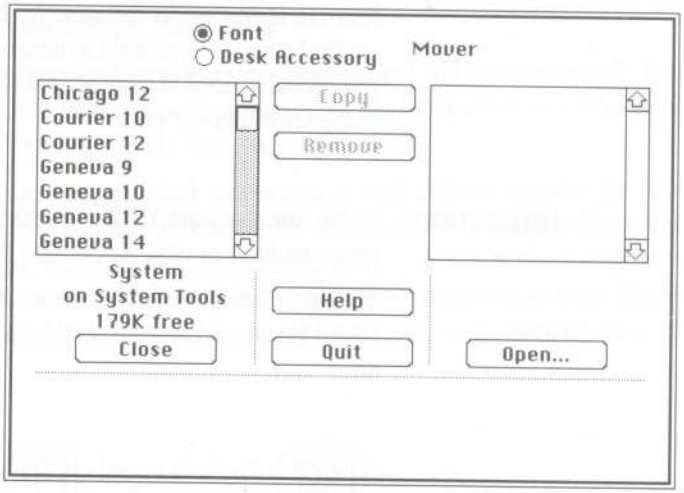


Figure 4-2
A typical Font/DA Mover opening dialog box

You can also open Font/DA Mover by selecting the icon of any font or desk accessory file and choosing Open from the File menu, or by double-clicking the icon. In this case, the list on the left shows the contents of the selected file. If you open a desk accessory file, the Desk Accessory button is automatically selected.

2. **Click either the Font button or the Desk Accessory button, depending on what you want to add or remove.**

   If the Font button is selected, the list representing any open file, on the right or the left, contains fonts only. If the Desk Accessory button is selected, the list representing any open file contains only desk accessories.

3. **Use the Open buttons to present lists of any other System, font, or desk accessory files.**

   If necessary, first click Close to close the file currently displayed. Each Open button lets you control what's displayed in its list. Both the file you're looking at and the disk it's on are shown below each list.

   Whenever you click an Open button, a dialog box appears with a directory of folders and System, font, and/or desk accessory files on the current disk or in the current folder. (See Figure 4-3.) Use that dialog box to switch disks or move up, down, or across your file hierarchy. See the Appendix, "Moving Through the File System," or your *Macintosh System Software User's Guide* for more details on how to use the directory dialog box.

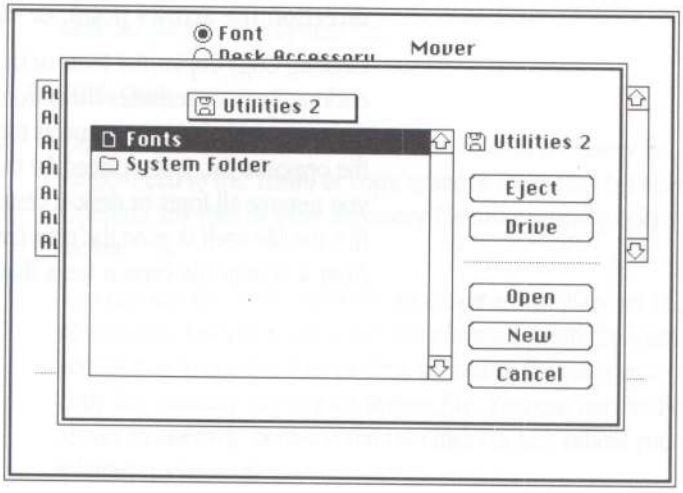


Figure 4-3
Dialog box for locating System files and locating or creating font or desk accessory files

4. **Open the file you want to look at by selecting its name and then clicking Open, or by double-clicking its name.**

   You can look at and work with any existing System, font, or desk accessory file.

   You can create a new file for storing your own collection of fonts or desk accessories by clicking New, naming the file, and clicking Create.

5. **Select the fonts or desk accessories you want to copy or remove.**

   You can select from either list. Click to select a single font or desk accessory. While holding down the Shift key, click additional single fonts or desk accessories, or drag to select a group. Shift-click to deselect a selected file. The number of bytes selected is displayed as well as the amount of space available on the disk. Both the name of the current file and the name of the disk it's on are displayed below each list.

   When a single font is selected, the name, size, and a sample of the font are shown at the bottom of the window; when more than one font is selected or when a desk accessory is selected, nothing is displayed there.

6. **Click Copy to copy the selected fonts or desk accessories in the direction the arrows point, or click Remove to remove them.**

   Clicking Copy copies the fonts or desk accessories to the opposite file; clicking Remove removes them from the file they're in. If a font or desk accessory with the same name as the one you selected already exists in the opposite list, it is replaced by the selected font or desk accessory. If you remove all fonts or desk accessories from a font or desk accessory file, the file itself is gone the next time you click Open. You can't remove from a System file certain fonts that the system needs.

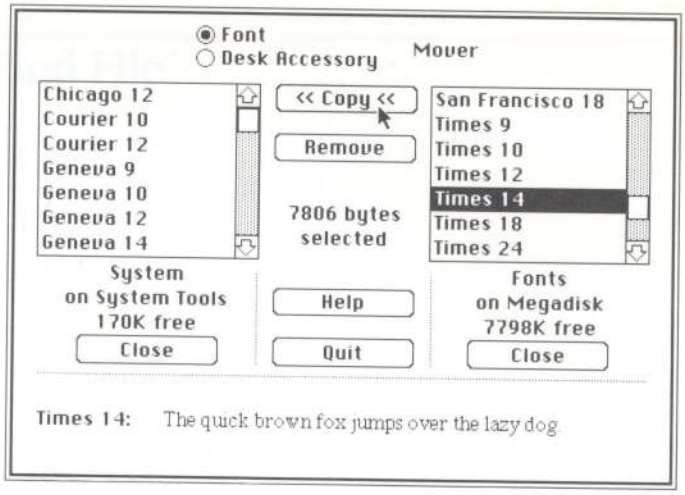


Figure 4-4
Copying a selected font with Font/DA Mover

Only fonts and desk accessories in the current startup disk's System file are available to applications you use with that disk. You're limited to 15 desk accessories in a System file.

7. Click Quit.

On the desktop, you can drag any font or desk accessory files you no longer need to the Trash, or copy or move these files between disks. Opening any font or desk accessory file automatically opens the Font/DA Mover.

You can use the Font/DA Mover to create an auxiliary set of fonts or desk accessories. Later you can move the current System file fonts or desk accessories to another font or desk accessory file you create, and then copy the auxiliary file to your System file. You can use the Font/DA Mover to alternate between the two files (or any others you create) whenever you want.

CHAPTER 5

Find File

FIND FILE IS A MACINTOSH DESK ACCESSORY THAT HELPS YOU LOCATE FILES ON your disks. When you use the **hierarchical file system** to store a large number of files—including documents, application programs, folders, system files, and accessories—you may find it difficult to recall what you've named your documents or to figure out where you've placed your files. Find File helps you do both.

When Find File is installed, you can use it to search for a file by specifying the entire filename, a keyword found in the name, or a sequence of characters contained in the name.

To help identify the proper file, you can instruct Find File to display essential information about any item found in a search. To help you use the file, Find File also shows the hierarchical chain of folders indicating where it's stored on the disk, and it allows you to move the file to your desktop. You can also use Find File as a short cut to open a specific document while you're using an application program.

Find File can search for files on hard disks and 3.5-inch disks. It works on double-sided disks (800K) just as it does on hard disks, but it does not recognize folders on single-sided (400K) disks.

You can use Find File to search within specified folders or on other disks. And you can conduct searches "in the background." That is, Find File can continue a long search even while you are working in an application.

Installing Find File

Use the desk accessory option of Font/DA Mover to install or update Find File, which is found in the Desk Accessory File in the Font/DA Mover folder on your *Utilities* disk 2. (See Chapter 4.) Once installed, Find File appears as a desk accessory on the Apple menu at the upper-left corner of your screen. You can also copy a current version of a System file that contains Find File onto your startup disk.

Searching for files

You can search for files while you're using the Finder or an application. Follow these five steps:

1. Choose Find File from the Apple menu.

The Find File window appears on the screen, with the insertion point blinking in the "Search for" box.

The Find File menu appears at the right side of the menu bar.

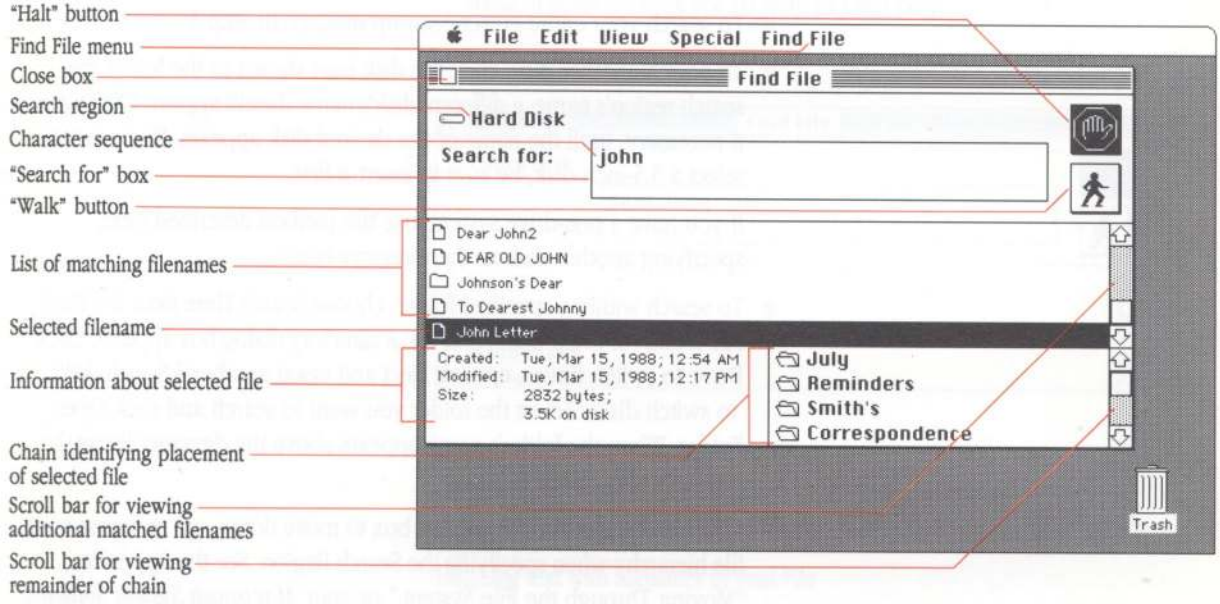


Figure 5-1
Features of Find File

2. Select the search region.

The search region—the disk or folder to be searched—is shown in the upper-left corner, just below the close box. When you open Find File, the search region is preset as the disk from which Find File is operating—the current startup disk. In the example in Figure 5-1, the search region is Hard Disk. (See your *Macintosh System Software User's Guide* for more about startup disks.)

You can use Find File to search any disk. If you think that searching the entire disk will take too long, you can specify that Find File search only a specified folder.

Use one of the following three methods to select the search region:

- To search your entire current startup disk, go to Step 3.
- To search another disk, click the disk icon shown to the left of the search region's name: a different disk's name should appear. Click again, if necessary, until the name of the desired disk appears. If you want to select a 3.5-inch disk, be sure to insert it first.

  If you have a one-drive system, use the method described next, specifying another disk as the directory title.
- To search within a specified folder, choose Search Here from the Find File menu (or press Command-H). A directory dialog box appears. Click Drive to switch drives, or click Eject and insert another 3.5-inch disk to switch disks. Select the folder you want to search and click Open Folder. When the folder's name appears above the directory list as the directory title, click OK.

  You can use the directory dialog box to move down, up, or across your file hierarchy when specifying the Search Region. See the Appendix, "Moving Through the File System," or your *Macintosh System Software User's Guide* for more detailed instructions.

  When you click OK, you return to the Find File window. The directory title, not the selected folder in the directory list, becomes the search region.

  When you click Cancel, you return to the Find File window. The search region is unchanged.

3. **To search, type any sequence of characters.**

   Find File attempts to match any sequence of characters that you type—letters, digits, or other keyboard symbols—with one or more filenames.

   When it searches, Find File makes no distinction between uppercase and lowercase letters, and it searches for the character sequence regardless of where it appears in a filename.

   Find File's Search function interprets a space to mean "and." That is, each word is treated as a separate character sequence. For example, if you type `Dear John`, it looks for any filename containing both "Dear" and "John," such as Dear John, Dear Old John, or Johnson's Dear. On the other hand, it does not look for To John or Dear Jane.

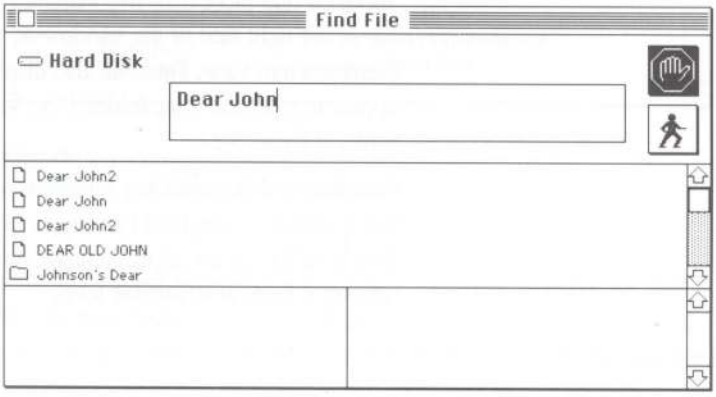


Figure 5-2
Matching text with filenames in Find File

- *User's tip:* Avoid including articles (*a, and, the*) and small prepositions (such as *to, for, of*) in your character sequences. If you specify To John, for example, Find File does not locate the file named Letter For John.

You can modify any character sequence using standard Macintosh editing steps—that is, by moving the insertion point, by pressing the Delete key, or by selecting any character or characters.

4. **To start a search, click the button with the "walk" icon on the right side of the Find File window.**

   You can press Return or Enter as a short cut.

5. **To end a search, click the button with the "halt" icon.**

   Once you have ended a search, you can't continue where you left off. (Clicking "walk" again restarts the search at the beginning.)

You can type a new character sequence and begin a search whenever the Find File window is displayed, *unless a search is already in progress.*

As Find File locates files matching the "Search for" character sequences, it lists them along the left side of the window. Next to each filename, it also displays a small icon identifying the file as a document or system file, an application, or a folder.

Should it find more than five matching filenames, Find File activates a scroll bar at the right side of the window so you can scroll other matching filenames into view. Find File also displays filenames more than once if they appear in more than one folder. (See, for example, the Dear John2 files shown earlier in Figure 5-2.)

Searching a disk containing hundreds of files can take some time. To tell you that a search is over, Find File beeps; or, if your speaker volume is set at zero, the menu bar blinks once. To make sure that you get the message, keep your speaker volume at an audible level.

Getting information

You can display information about a file by clicking its filename in the Find File window.

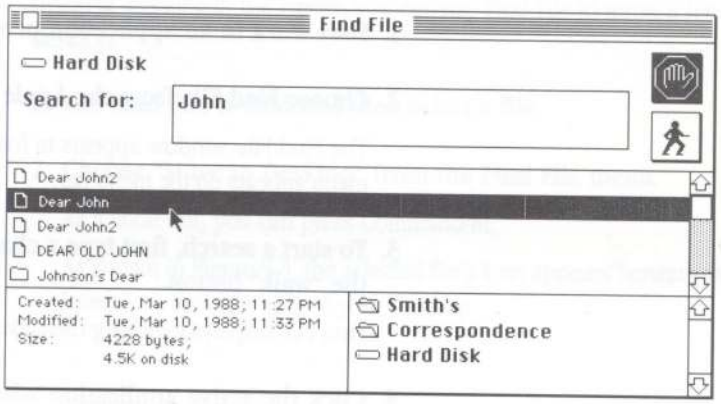


Figure 5-3
Selecting a listed file to display information

In the lower-left portion of the window, Find File displays the date and time the file was created, when it was last modified, and its size. This information may help you determine whether the listed file is the file that you are looking for.

In the lower-right corner of the window, Find File displays the chain of folders that must be followed to get to the file. If a file is nested more than four folders deep, Find File activates a scroll bar at the right side of the window to let you view the remaining folders.

Operating in the background

Since a search can take several minutes, Find File has been designed to save you time by continuing to search for files in the background—while you're working within an application. To search in the background, follow these five steps.

1. **Start work in an application program.**

2. **Choose Find File from the Apple menu.**

   The Find File window appears in front of your work, and the Find File menu appears on the menu bar.

3. **To start a search, first type a character sequence, and then click the "walk" button.**

   Find File displays matching filenames as they are found.

4. **Click the active application window to return to the application you are using.**

△ **Important** Do not click Find File's close box if you wish to run Find File in the background. Doing so immediately halts any search that is already in progress. △

With most application programs you can write, calculate, or carry out other operations while the search continues. However, a few applications (such as early versions of MacPaint) do not allow you to return to your work without closing Find File; others (such as MacDraw) automatically close Find File, halting the search, whenever you click the application window.

Find File notifies you that its search is over with a beep.

5. **Redisplay the Find File window by choosing Find File on the Apple menu.**

   Filenames matching the character sequences that you typed in the "Search for" box are now displayed. You can display file information and record it for future reference and, if you wish, you can click the application window to continue your work.

Opening files

Though Find File does not directly open documents, it is designed to help you find and open documents and applications.

While working in the Finder

If you're working in the Finder, you can use Find File to move a file to the desktop.

1. **Use Find File to find and then select a file.**

2. **Choose "Move to Desktop" from the Find File menu.**

   As a short cut, you can press Command-M.

   As shown in Figure 5-4, the selected file's icon appears beneath the disk icon(s) on the right side of your desktop.

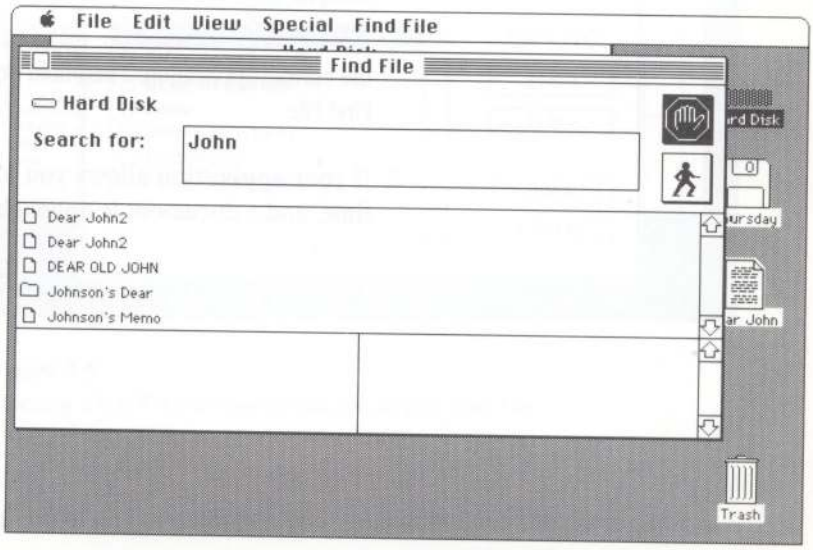


Figure 5-4
The document Dear John moved to the desktop

3. **Close the Find File window by clicking its close box.**

4. **Open the document or application by selecting its icon and choosing Open from the File menu or by double-clicking its icon.**

   When you quit the application, the file will still be shown on the desktop.

   To return the file to its original folder, select its icon and choose Put Away from the File menu. You can move the file back with Put Away even if you change its name, but not if you move it to any other folder or to the disk window itself.

   You can also can drag the file's icon back into its original folder, into the Trash, or into any other folder.

While working in an application

If you're working in an application, you can use Find File to help open any document that you created using that application. Follow this procedure:

1. **While working in an application, use Find File to find and then select a document.**

   If MultiFinder is turned on, make sure that the application you want is the current application. Then hold down the Option key when you open Find File.

2. **If your application allows you to open only one document at a time, and a document is open, choose Close from the File menu.**

3. Choose Open from the application File menu.

If the Open command is dimmed, close Find File by clicking it close box. Then Choose Open.

A directory dialog box appears. The name of the folder or disk containing the selected document appears as the directory title at the top.

Let's say the MacWrite document Dear John is nested in a folder named Smith's. If you find and select Dear John with Find File, Smith's automatically becomes the directory title when you choose Open from the MacWrite File menu.

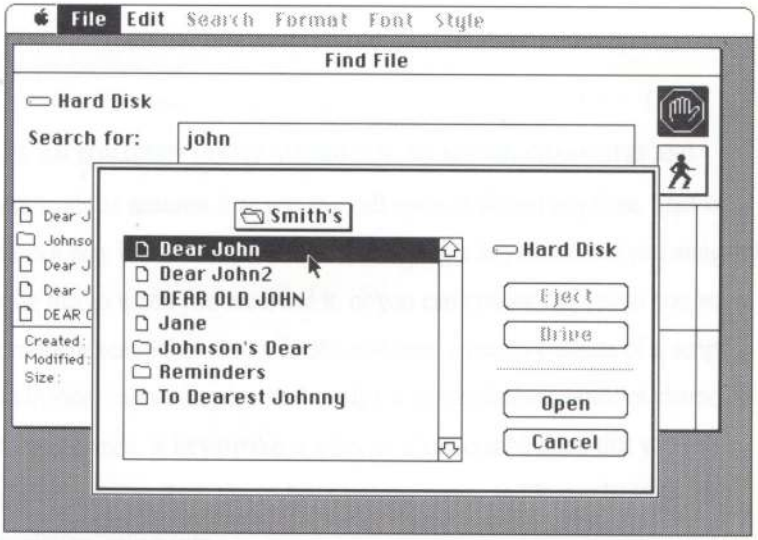


Figure 5-5
Opening a MacWrite document with the help of Find File

4. Select and open the correct document from the directory list.

Quitting Find File

You can quit Find File by clicking the close box, by choosing Close from the File menu when the Find File window is active, or by entering or leaving an application. Quitting Find File halts any search in progress.

The next time you open Find File, the "Search for" box is blank, and the startup disk is shown as the search region. Remember, you don't have to quit Find File in order to use an application program.

CHAPTER 6

MacroMaker

THE MACROMAKER™ UTILITY ALLOWS YOU TO RECORD CHARACTERS AND commands as **macros** that you can call upon at almost any time. That is, you can play back a recorded macro by typing a keystroke that you assigned to the macro when you recorded it, or you can choose the macro you want from the MacroMaker menu. In MacroMaker, a macro consists of a script and in most cases a keystroke. A **script** is a recorded sequence of characters and commands. A **keystroke** is a key or a key combination that you press to "play" a script. Each macro has a unique name, and it may have its own description, called *info*.

This chapter introduces you to MacroMaker and tells you how to install the utility. Next it shows how to create and use macros. Later it explains other ways you can work with your macros and macros files.

Ways to use MacroMaker

With MacroMaker, there are three basic ways you can use macros:

- You can remap your keyboard by creating a single-character macro.

  For example, you can record as your macro the curly apostrophe (') —it's normally typed by holding down the Shift and Option keys while typing the right-bracket key (]). If you assign the straight apostrophe (') as the key triggering the macro, you'll get the curly apostrophe every time you type the straight one.

- You can record a sequence of characters that you use frequently, such as an address or a legal boilerplate.

  In this use, MacroMaker is similar to the Scrapbook desk accessory, but it is quicker. Let's say you are writing a paper about U.S. foreign policy during the Carter Administration. You could record a macro consisting of the letters in "Zbigniew Brzezinski" and assign it the key combination "Option-Z." Then, every time you need to refer to Brzezinski, the National Security Adviser, you could automatically type his name, spelled correctly, into your document, simply by pressing Option-Z.

- You can assign your own keystroke short cuts to commands that don't already have them.

  For example, if you're using an application, such as MacPaint, that doesn't have a keyboard equivalent for the Save command in the File menu, you can create a Macro that does exactly that. Just record the process of choosing Save and assign Command-S as the keystroke.

With MacroMaker, you can place a macro in a list of macros associated with the application program you are using. Alternatively, you can place it in a global list that you can call upon no matter what application you are using. Or you can place it in a list that you've already created while working with another application program.

MacroMaker works on the Macintosh Plus and more recent versions of the Macintosh, such as the Macintosh SE and Macintosh II. For MacroMaker to work properly, you must be using version 4.1 or higher of the System file. The version number is shown in the Comments box at the bottom of the Get Info window. To check it, open the System Folder on your current startup disk, select the System file, and choose Get Info.

You can share your macros with any Macintosh user who has MacroMaker installed.

Installing and removing MacroMaker

MacroMaker appears on your *Utilities* disk 2 as a folder containing the MacroMaker program, the MacroMaker Help file, and a preset macros file for use with the Apple Extended Keyboard.

To install MacroMaker

To install MacroMaker, follow these steps:

1. **Select the MacroMaker folder on your *Utilities* disk 2 and choose Open from the file menu.**

   As a short cut, you can double-click on the folder.

2. **Drag the MacroMaker and MacroMaker Help icons from the MacroMaker folder into the System Folder on your startup disk.**

3. **If you have an Apple Extended Keyboard, also copy the file labeled Macros from your *Utilities* disk 2 into the System Folder on your startup disk.**

   The file contains macros assigning the keys F1, F2, F3, and F4 to the Edit commands Undo, Cut, Copy, and Paste, respectively, when you are using standard Macintosh applications.

4. **Restart your Macintosh.**

   The MacroMaker menu, identified by a small tape cassette icon, appears at the right of the menu bar whenever the MacroMaker application is installed.

   When the MacroMaker Help file is installed, the About MacroMaker command in the MacroMaker menu presents a series of screens displaying reference information about MacroMaker's commands and windows.

Tape icon, which identifies MacroMaker menu

To remove MacroMaker

If you don't need MacroMaker, but you do need the space on the menu bar, you can remove MacroMaker by following these steps:

1. **Drag the MacroMaker file from the System Folder to another folder or the disk-level directory.**

2. **Restart your Macintosh.**

   The MacroMaker menu is no longer shown.

   To reinstall MacroMaker, drag the MacroMaker file back into the System Folder and restart your Macintosh again.

Setting up a macros file

MacroMaker uses macros that are stored in the Macros file in the System Folder of your current startup disk. When you install MacroMaker, it creates that Macros file, unless you have already placed a file named Macros in the System Folder. Each new macro you create is added to the Macros file.

Your Macros file can contain numerous macro lists: one global list and one for each application program. When the MacroMaker window is closed, you can view the global macro list and the list for the current application by pressing down on the MacroMaker menu.

❖ *Note:* The current application is the one with its menus shown in your Menu bar. For MacroMaker's purposes, the Finder is an application program, so if you haven't opened an application, the Finder is shown as your current application.

To record a macro

When you create a macro, record its script while working in the application program with which you expect to use it.

This version of MacroMaker records only certain mouse actions, so you probably won't be able to record all steps you take in dialog or alert boxes. However, because one button in most dialog boxes—usually it's outlined in bold—can be chosen with the Return key, you can record the action it represents.

To record a macro for an application program, follow these steps:

1. **Open a new document in that application program.**

   You can also use an existing document, but anything you record is entered in the document.

   Make sure the application is set to accept menu commands or typed characters. For example, if you're recording text in a graphics program such as MacPaint, be sure to select first the Text tool. If the application is not set to accept commands or typed characters, MacroMaker may still record them, but you won't see them on the screen.

2. **Open MacroMaker by choosing Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, with the name of the current application shown at the upper right.

You create a macro in the "cassette recorder"—the loaded macro—before adding it to the macro list for the current application.

- *Note:* If you want to record a script and don't want to set up the macro first, you can start recording by choosing Start Recording from the MacroMaker menu. Then, when you choose Stop Recording from the MacroMaker menu, the MacroMaker window opens automatically. Name the macro and click store if you wish to save the script.

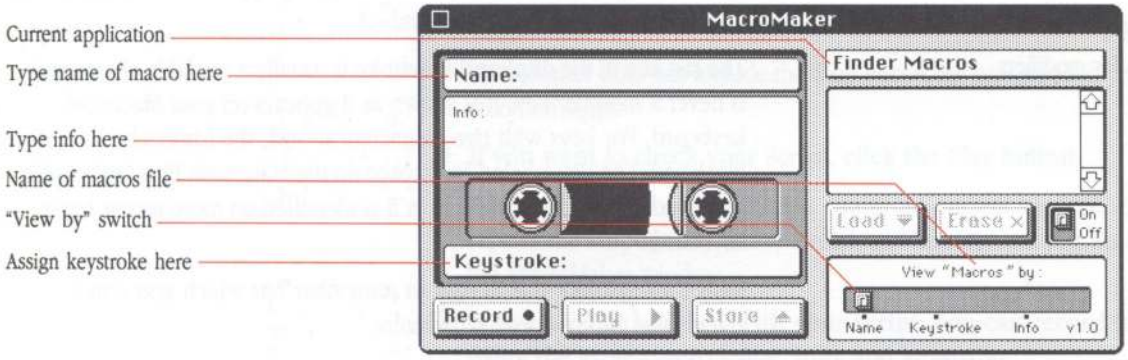


Figure 6-1
The MacroMaker window

3. **Name the macro by typing up to 16 characters on the line labeled "Name."**

   This is the way the macro will be shown in the MacroMaker menu, so choose a brief name that identifies this macro uniquely.

   You can edit the name in the usual Macintosh fashion.

4. **If you wish to create a description of the macro, place the insertion point in the *info* area below the name, and then type a phrase explaining what the macro does.**

   You can move the insertion point to the info area with the mouse or by pressing the Tab key or Return key after entering the macro name.

5. **Select the line labeled "Keystroke" and type the keystroke that you want to trigger the macro.**

   You can select the keystroke line with the mouse or by pressing the Tab or Return key after typing info.

Figure 6-2
Symbols for modifiers

You can hold down one or more modifier keys, such as the Command key or Option key, while typing a readable character. MacroMaker shows symbols representing modifier keys before it shows readable characters. One modifier key, Control, is not present on the Macintosh Plus keyboard.

- *Note:* Although there is no key that turns on the numeric keypad, numbers typed on the numeric keypad are preceded with the symbol shown in Figure 6-2 to distinguish them from the numbers on the typewriter-like keyboard. (When modified by the Shift key, the following symbols on the Macintosh Plus keypad are identical to the keyboard arrow keys: /, *, +, and –.)

The last key in the displayed keystroke is usually a readable character; it is never a modifier key. It is shown as it appears on your Macintosh keyboard. For keys with two characters shown, the lower character is displayed. The key labeled Backspace on the Macintosh Plus keyboard is displayed as Delete, which is how it is identified on more recent Apple keyboards.

Assign a keystroke that is easy to remember but which you don't already use to type special characters.

You can replace the keystroke by typing another one while the line is selected. If you don't want a keystroke assigned, you can remove it by pressing the Delete (Backspace) key.

The keystroke is shown to the right of the macro name in the MacroMaker menu. If you don't assign a keystroke, the macro will still appear in the MacroMaker menu, and you'll be able to call on it by choosing it from that menu.

6. **Click the Record button.**

MacroMaker returns you to the current application program.

The MacroMaker menu icon blinks to remind you that anything you type and any command you choose will be recorded as part of your macro.

7. **Enter the script you wish to record.**

If you make a mistake while entering text, you can press Delete (Backspace), just as you normally do to erase a character. In this case, both the character and the deletion are recorded.

You can record menu commands in the application you are using, with two limitations.

You can record menu commands in the application you are using, with two limitations.

- Although some applications allow you to move horizontally from one open menu to the next, when recording with MacroMaker you must always open a menu by dragging down from the menu bar.
- MacroMaker does not recognize changes in menus. The macro chooses menu items by position, not by name.

8. **To stop recording, choose Stop Recording from the MacroMaker menu.**

   This returns you to the MacroMaker window.

   MacroMaker does not include the Stop Recording command in your recorded script.

9. **If you want to check your script, click the Play button.**

   MacroMaker automatically returns you to the current application, repeats the script you've just recorded, and then returns you again to the MacroMaker window.

10. **If you are not satisfied with your script, you can record it again, using the same macro name, info, and keystroke.**

    The old recording is erased by the new one.

11. **Click the Store button to move the loaded macro into the macro list.**

    If the macro is named and has at least a script or an assigned keystroke, it is added to the MacroMaker menu and to the macro list on the MacroMaker window's right. If that list already contains a macro with the same name or assigned keystroke, MacroMaker asks if you want to replace the existing macro or cancel the store command. If you cancel the store command, you can always rename the macro or change the keystroke before clicking Store again.

    If you close the MacroMaker window while there is still a new (or changed) macro in the cassette recorder, MacroMaker asks if you want to store the macro before closing.

▲ Warning If you record a new script without storing the loaded macro, the loaded script is permanently lost. ▲

To create a global macro

A global macro is a macro that you can call upon no matter which application program is current. Create global macros only for scripts that you expect to use within many application programs.

△ **Important** Because menus vary from application to application, do not create global macros containing menu commands. △

You can assign the same keystroke to an application-specific macro and to a global macro, but when you're using that application the keystroke triggers only the application-specific macro, even though MacroMaker still shows the global macro in the MacroMaker menu. When you're using other applications, however, the keystroke calls upon the global macro.

When recording a global macro, make sure you're using an application that allows you to enter text. The Finder is generally a bad place to record global macros, since typing is likely to rename some of your files. If you need to work in the Finder, choose Get Info from the File menu and type (while recording) your script in the Comment box at the bottom of the Get Info window.

To record a global macro, follow these steps:

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, with the current application shown at the upper right.

2. **Move the mouse to place the pointer on the name of the current application, and press the mouse button.**

   A menu of macro lists appears.

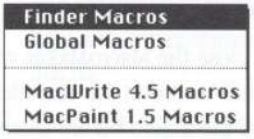


Figure 6-3
A typical pop-up menu of macro lists

3. **Drag down to Global Macros, and release the mouse button.**

   "Global Macros" appears where the current application was shown, and the macro list is now the global macro list.

4. **Follow steps 3 through 11 in "To Record a Macro," earlier in this section.**

A few special scripts

You can create macros to do some surprising things. Here are a few suggestions:

- You can record an "erase text" macro consisting of several Delete (Backspace) characters.
- You can create and store a macro without recording a script. In this case, the keystroke triggers no action.

  You may wish to create such a "null" macro if you are using an application where a familiar keystroke normally triggers an undesired action. For example, in some applications, Command-P is a short cut for the print command. If you usually work in MacWrite, where Command-P changes the type style to Plain, you may wish create a null macro (for the other application) to disable the other application's Print command short cut. That way, when you're working in that application, you won't bring up the print dialog box every time you press Command-P.
- When a command requires a delay before you type a confirming key such as Return, be sure to record the delay. That is, wait until the dialog box is shown on your screen.
- You can create a macro within a macro. That is, if you've recorded *a script consisting of more than one keystroke,* MacroMaker—at playback—plays all the macros called upon by keystrokes contained in that script.

  Let's say you already have a macro that spells out "Zbigniew Brzezinski" whenever you type Option-Z. You can create another macro, that types "Zbigniew Brzezinski's report," simply by recording a script consisting of Option-Z followed by *'s report.*

△ **Important** Be careful not to create a closed loop, in which the first macro calls upon a second macro that calls upon the first macro. △

- You can record a macro to help you quit your work in a hurry. For example, if you normally work with one application open, and you expect to save your changes when you finish, then you can record a macro consisting of Command-Q, a return character, and the Shut Down command from the Finder's Special menu.

  In most application programs, Command-Q calls upon the Quit command. The Return key tells the computer to save the changes you've made in your document (if you've already named the document). Shut Down turns the computer off after the document is saved.

  If you're working on a long document, the process of manually saving it to your disk may take a long time. However, if you record a script that ends with the Shut Down command, MacroMaker can do the waiting for you, while you rush off to answer the phone, attend a meeting, or feed your baby.

  When you record the Shut Down command, your Macintosh shuts down after you manually instruct MacroMaker to store the macro and close the MacroMaker window.

Using your macros

You can call upon the macros you've recorded at almost any time. This is the simplest, yet probably the most frequent way that you'll be using MacroMaker.

First, make sure that MacroMaker is installed and turned on. If the MacroMaker menu is not shown at the right of the menu bar, install MacroMaker as described earlier in "To Install MacroMaker." If all macros and commands in the MacroMaker menu, except Open MacroMaker and About MacroMaker, are dimmed, that means MacroMaker is turned off. Turn MacroMaker on (as explained later in "To Turn MacroMaker Back On"), and then close the MacroMaker window.

❖ *Note:* If there are so many menus in the Menu bar that the MacroMaker menu doesn't fit, you may wish to close other desk accessories so there is enough room.

The MacroMaker menu lists all *available* macros—that is, all macros that you can call upon at the time. The macros for the current application are listed above the global macros.

Figure 6-4
A typical MacroMaker menu

Each macro is identified by its name and, if you have assigned one, its keystroke. If you have assigned an application-specific macro the same keystroke as a global macro, the keystroke is shown with both, but you can use it only to activate the former.

❖ *Note:* If an assigned keystroke normally appears as a short cut in one of the application program's own menus, it is still shown, but it no longer activates the command with which it is listed.

If you have more macros than fit in the MacroMaker menu, you can scroll them into view by dragging down from the bottom of the menu.

Before you call upon a macro, be sure that it will have the intended effect. For example, if a macro contains a Tab, your text may jump to the wrong position if you've moved the tab stop in your document.

Or, if your macro is designed to *replace* existing text, the text will just be *added* if the existing text is not highlighted first. You may run into this problem if you're recording a macro to carry out a search command in some applications.

To call upon a macro

There are two ways to call upon a macro:

- Type its assigned keystroke.
- Choose the macro from the MacroMaker menu.

MacroMaker "plays" the script that you call upon, "typing" characters and choosing commands.

When the macro is finished playing, you can continue working in your application.

❖ *Note:* You can call upon a macro and continue typing immediately, without losing the text that you enter while the macro is still playing. Anything that you type is "remembered" by MacroMaker. The characters are entered into the document when the macro is finished playing.

To interrupt a macro

To interrupt a macro before it has finished playing, follow these steps:

1. **Click the mouse button.**

   The macro stops playing, and MacroMaker presents a dialog box, asking if you wish to interrupt or continue playing the macro.

2. **Click Interrupt.**

   MacroMaker loses all characters that you've typed since you started playing the macro, and it returns you to your application program, with only a portion of the script carried out.

   If you click Continue, MacroMaker continues to play the script.

Checking and changing your macros file

Once you've set up your macros file, you can check or change it by doing any of the following:

- review your macro list
- check the script in any macro
- change the script, name, info, or keystroke in any macro
- copy or move a macro to another list
- remove any macro

To review your macro list

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, showing on the right the list of macros associated with the current application program.

2. **To list the same macros by keystroke or info, drag the "View by" switch to the right.**

   You can also move the switch by clicking in the gray area.

   All macros are listed by name, in alphabetical or numerical order, no matter which view you've selected. If a macro has no assigned keystroke or info, the listing to the right of that macro's tape icon is blank in the respective view.

To check a macro

To check the script of a macro, follow these steps:

1. **Open a new document in the application program corresponding to that list.**

   Make sure the application is set to accept menu commands and typed characters.

   If you're checking a global macro, you can use any convenient application.

2. **Choose the macro from the MacroMaker menu.**

   MacroMaker plays the macro.

❖ *Note:* You can also open MacroMaker, select and load the macro, and click the Play button.

To change a macro

You can change any element—script, name, info, or assigned keystroke—of any macro by loading it into the cassette recorder. Follow these steps:

1. **If you plan to change the script, first open a new document in the application program corresponding to that list.**

   If you're changing a global macro, you can use any convenient application.

2. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, showing on the right the list of macros associated with the current application program.

   If you're changing a global macro, choose Global Macros from the pop-up menu of macro lists. The global macro list appears.

3. **Select the macro you wish to change by clicking its listing in the Macro list, and click the Load button.**

   As a short cut, you can double-click the macro's listing.

   If necessary, scroll first to bring the macro's listing into view.

   If you've already changed a macro, but it is still in the cassette recorder, MacroMaker asks you if you want to store it before loading another.

   When you click Load, the macro is loaded into the cassette recorder. As shown in Figure 6-5, the macro's name, info, and keystroke are displayed.

   The macro's listing is dimmed in the macro list.

Figure 6-5
A macro loaded in the "cassette recorder"

4. **If you want to change the script, record a new script.**

   For details, see "To Record a Macro," earlier in this chapter.

   When you're done, don't forget to choose Stop Recording from the MacroMaker menu.

5. **If you want to change the name, info, or keystroke, type in a new one or edit the old one.**

   Press Delete (Backspace) if you don't want to assign a keystroke.

6. **Store the changed macro by clicking the Store button.**

   The macro is removed from the cassette recorder, and its listing is no longer dimmed in the macro list.

To copy or move a macro to another list

Macros that you've created while working with one application program can be used in other applications. Follow these steps to copy or move one or more macros to the list associated with another application.

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, showing on the right the list of macros associated with the current application program.

2. **If you are copying or moving a macro *from* another list, choose the other list from the menu of macro lists.**

   The selected macro list appears.

3. **Select the macro you wish to copy or move by clicking its listing in the macro list.**

   If you wish to copy or move more than one macro, select them by holding down the Command key while clicking the listing for each one. Or you can select several adjacent macros by holding down the Shift key while clicking the first and the last.

4. **Press Command-C to copy or Command-X to cut.**

   Either command places the selected macros—name, info, script, and keystroke—on the Clipboard. Cut removes them from the macro list.

5. **Choose, from the menu of macro lists, the macro list for the application to which you want to copy or move macros.**

   To convert an application-specific macro into a global macro, choose Global macros from the menu of macro lists.

6. **Press Command-V to paste.**

   The macros that you earlier copied or cut to the Clipboard are added to the currently shown macro list.

   If a macro with the same name or keystroke as a macro you are pasting is already in the list, MacroMaker asks if you wish to replace it or cancel the Paste command.

❖ *Note:* You can also copy a single macro from one macro list to another by loading it into the cassette recorder, choosing another list, and clicking Store.

To remove a macro

To remove one or more macros from a macro list, follow these steps:

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears, showing on the right the list of macros associated with the current application program.

2. **If you want to remove a macro from another list, choose Global Macros or the application you want from the menu of macro lists.**

   The selected macro list appears.

3. **Select the macro you wish to remove by clicking its listing in the macro list.**

   If you wish to remove more than one macro, select them by holding down the Command key while clicking the listing for each one. Or you can select several adjacent macros by holding down the Shift key while clicking the first and the last.

4. **Click the Erase button.**

   You can also press Command-X to cut.

   The macros are removed from the list.

Working with other macros files

When you first install MacroMaker, the active macros file is named Macros, and it's located in the System Folder of your current startup disk. However, you can create and use other macros files using MacroMaker's Another File command. You can switch back and forth between macros files, and you can make a copy of any macros file, for use on another Macintosh or just to save as a backup.

To create or open another macros file

To create or open a new macros file anywhere on your disks, follow these steps:

1. **Choose Another File from the MacroMaker menu.**

   MacroMaker presents a dialog box, asking whether you want to create a new file or open an existing one. (See Figure 6-6).

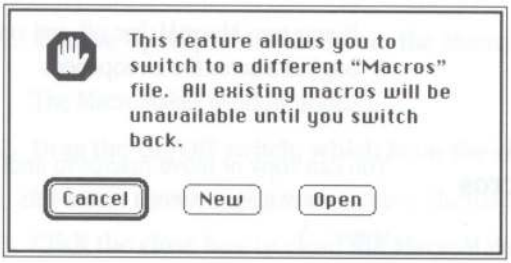

This feature allows you to switch to a different "Macros" file. All existing macros will be unavailable until you switch back.
Cancel
New
Open

Figure 6-6
The Another File dialog box

2. **Click New to create a new macros file; click Open to open an existing macros file.**

   A directory dialog box appears.

3. **If you're creating a new macros file, type a name for it.**

   It makes sense to use the word Macros in the filename—Abram's Macros, for example—so you can easily identify it.

4. **Specify the folder or disk where you want to place your new macros file; or select an existing macros file.**

   See the Appendix, "Moving Through the File System," or your *Macintosh System Software User's Guide* to learn more about how to use directory dialog boxes.

5. **Click Save (if you're creating a new file) or Open.**

   The dialog box closes.

   When the MacroMaker window is open, the name of the new or just opened file appears just above the "View by" switch. You can record, change, remove, check, copy, and move macros in that file.

   The MacroMaker menu now calls upon macros from the new or just-opened file.

   If you turn MacroMaker off and on, or if you restart your Macintosh, the original macros file is reopened.

To copy or move macros to another file

You can copy or move macros to another macros file the same way you copy or move macros between macro lists (in the same macros file). Follow these steps:

1. **Open a macros file.**
2. **Press Command-C to copy or Command-X to cut the selected macros.**
3. **Create or open another macros file.**
4. **Use the menu of macro lists to show the macro list where you want to place the macros.**
5. **Press Command-V to paste the macros you just copied or cut into the macro list.**

To copy or move a macros file

You can duplicate any macros file in the Finder by selecting its icon and choosing Duplicate from the File menu.

In the Finder, you can move a macros file just like any other file. However, you cannot remove or replace the Macros file in the System Folder while MacroMaker is on. Turn off MacroMaker before removing or replacing the file. (See "To Turn Off MacroMaker" in the next section.)

To rename a macros file

While working in the Finder you can rename any macros file in the usual Macintosh fashion, but you can't rename a macros file while it is active.

Turning MacroMaker off and on

Normally, MacroMaker is turned on. You may wish to turn it off, however, so your global macros won't interfere with the use of a specific application (one that normally uses, for another action, key combinations that you've assigned to global macros).

To turn off MacroMaker

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears.

2. **Drag the On/Off switch, which is on the right, to the Off position.**

   You can't record or play macros when MacroMaker is turned off.

3. **Click the close box to close the MacroMaker window.**

   The MacroMaker menu is still shown, but all commands except Open MacroMaker and About MacroMaker are dimmed.

To turn MacroMaker back on

1. **Choose Open MacroMaker from the MacroMaker menu.**

   The MacroMaker window appears.

2. **Drag the On/Off switch, which is on the right, to the On position.**

3. **Click the close box if you want to close the MacroMaker window.**

CHAPTER 7

Apple File Exchange

APPLE FILE EXCHANGE IS A MACINTOSH APPLICATION THAT ALLOWS YOU TO work with documents created on personal computers using MS-DOS and on the Apple II using ProDOS®. And it allows anyone with an MS-DOS computer or an Apple II using ProDOS to work with documents that you've created on your Macintosh computer. **MS-DOS** stands for Microsoft Disk Operating System. It's the operating system that governs the IBM PC (under the name PC-DOS) and compatible computers. **ProDOS** stands for Professional Disk Operating System. It's the operating system that today controls most Apple II–family computers.

An **operating system** is a program that organizes the actions of the parts of the computer and its peripheral devices.

If you've been working with people who use computers controlled by non-Macintosh **operating systems,** you know that the world of computing is like the biblical Tower of Babel. It is difficult, sometimes impossible, to get your computers to work together, because the machines speak different "languages."

With Apple File Exchange (AFE), however, you use your Macintosh to translate files so that they make sense when you transfer them between computers.

If your AFE folder contains an appropriate translator file—described in detail later in this chapter—you can translate a document created with an application program on one operating system into a document that can be used with a similar application program on another operating system. For example, if you install the right translator file in your AFE folder, you can translate an MS-DOS file prepared with WordStar into a MacWrite document.

By using Apple File Exchange, you and your associates can work together more effectively, whether you are building a tower or just trying to run an office.

Start with this chapter to learn the basics of Apple File Exchange—how to open the utility and translate files. If situations arise that require using AFE's advanced features, this chapter refers you to specific sections of Chapter 8, "Apple File Exchange: Advanced Features." Once you're familiar with the essential features of AFE, go on to all of Chapter 8.

Uses for Apple File Exchange

When connected to your Macintosh SE or Macintosh II, the Apple PC 5.25-inch disk drive exchanges information between the Macintosh and 5.25-inch disks formatted (initialized) with MS-DOS.

Apple File Exchange is designed to meet a variety of translation needs. You need Apple File Exchange if

- you have an Apple PC 5.25-inch disk drive and want to transfer documents between the Macintosh and an MS-DOS computer that uses 5.25-inch disks
- you are working with an Apple II computer, such as an Apple IIGS®, that uses 3.5-inch disks, and you want to transfer documents between the Macintosh and the Apple II
- you are using a telephone line, network, or other connection to transfer files between your Macintosh and an MS-DOS or ProDOS computer, and you want to translate those files on your Macintosh

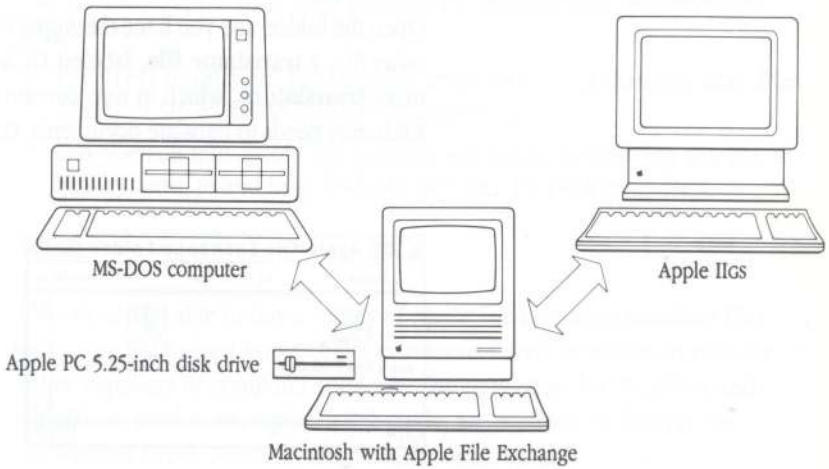


Figure 7-1
Exchanging information with both MS-DOS and ProDOS (Apple II) computers

What you need

The file exchange utility runs on any Macintosh computer that has a built-in 800K disk drive.

If you are planning to use Apple File Exchange to transfer files to or from a 5.25-inch MS-DOS disk, you'll need either a Macintosh SE or a Macintosh II. You'll also need an Apple 5.25 PC Drive and the Macintosh SE-Bus PC Drive Card or the Macintosh II PC Drive Card.

If you're planning to use Apple File Exchange to transfer files between your Macintosh and a 3.5-inch ProDOS disk, or if you're planning to translate files on your Macintosh, AFE works best when your Macintosh has two or more disk drives. Otherwise, you may have to switch disks repeatedly every time you translate a file.

The Apple File Exchange folder

Apple File Exchange appears as a folder on your *Utilities* disk 2. Before you use Apple File Exchange, copy the entire folder to a hard disk or another 3.5-inch disk with more space available.

Open the folder, and you'll see the Apple File Exchange application and one other file, a **translator file,** labeled DCA-RFT/MacWrite. It contains one or more **translators,** which in turn contain the information that Apple File Exchange needs to translate documents. (See Figure 7-2.)

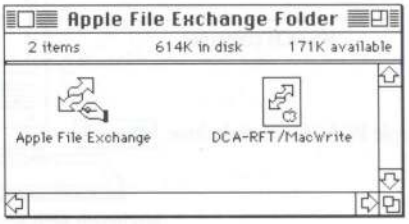


Figure 7-2
The open AFE folder on your *Utilities* disk 2

DCA-RFT stands for Document Content Architecture/Revisable Form Text. Many MS-DOS word processing applications, such as DisplayWrite 3 and DisplayWrite 4, allow users to save their documents as DCA-RFT files. This translator file contains translators allowing Apple File Exchange to convert DCA-RFT files to MacWrite, and vice versa. Apple provides the DCA-RFT/MacWrite translator file, as well as the equivalent of two built-in translator files explained later, but most translators are supplied by other companies.

You'll probably want to add translator files to your AFE folder, so you can translate files to or from a variety of MS-DOS or ProDOS applications. For example, to convert documents written with WordStar, a popular MS-DOS word-processing application, into MacWrite documents or vice versa, you'll need a translator file containing translators specifically designed to translate WordStar and MacWrite files. (See "Obtaining Translator Files" later in this section.)

In addition to the translator files that you see in the AFE folder, the Apple File Exchange application itself contains the equivalent of two translator files:

A **text file** contains information stored in the form of readable characters.

Files in **binary** form contain information represented as 1's and 0's.

- The "Text translation" file contains translators for exchanging **text files** with both MS-DOS and ProDOS computers.
- The "Default translation" file contains translators for copying any file, in **binary** form, to and from both MS-DOS and ProDOS computers.

Obtaining translator files

You should be able to buy a variety of Apple File Exchange translator files from your authorized Apple dealer or representative, as well as from many other suppliers of computer software. The translators for WordStar and MultiMate, used as examples in this guide, are products of Dataviz, Inc., 14 Winfield Street, Norwalk, Connecticut 06855, USA.

Three possible scenarios

Apple File Exchange is a flexible tool. It can help you select the files or translators for each translation, or it lets you make the choices yourself. AFE is designed to translate files in any of the three following situations:

- *You know which files you want to translate, and you want Apple File Exchange to select the translators.* This is the simplest way to use AFE, and it is described in this chapter.
- *You know which files you want to translate, but you want to select the translators.* You need to know a little bit more about Apple File Exchange. When you get to the section "Making Sure the Translators You Need Are Active," in this chapter, read the section "Selecting Translators" in Chapter 8, too.
- *You know which translators you want to use, but you don't know which files you want to translate.* Once you've mastered the essential steps of translation, as described in this chapter, you can learn how to take this approach by reading "Letting AFE Help Select the Source Files" in Chapter 8.

Using Apple File Exchange

No matter how many files you plan to translate, or how many translators you expect to use, you follow seven basic procedures:

1. To get started, you first open the Apple File Exchange application.
2. Next, you show the disk containing the files you want to translate and the disk you want to receive translated files.
3. You tell AFE where to put translated files.
4. Next, you select the files you want to translate.
5. You make sure that the translator(s) you need are active in the appropriate translation menu.
6. Then you translate your files, making sure that the translated files will fit on your destination disk.
7. Finally, you finish up by closing Apple File Exchange and working with the translated files.

Each of these procedures is described step-by-step in the following sections.

Getting started

To open Apple File Exchange, follow these steps:

1. **Open the AFE folder by selecting its icon and choosing Open from the File menu, or by double-clicking the AFE folder icon.**

2. **If you have obtained other translator files, copy them into the AFE folder.**

   Some suppliers may package several translator files together. Follow their instructions for placing the files in the folder.

3. **Open the Apple File Exchange application by selecting its icon and choosing Open from the File menu, or by double-clicking the icon.**

   The Apple File Exchange window appears. The directory list on the left shows files and folders on the disk containing Apple File Exchange.

   The AFE window resembles the Font/DA Mover dialog box. In fact, you can select files in Apple File Exchange essentially the same way you do in Font/DA Mover.

   Figure 7-3 illustrates a typical AFE window showing an MS-DOS disk and a Macintosh disk.

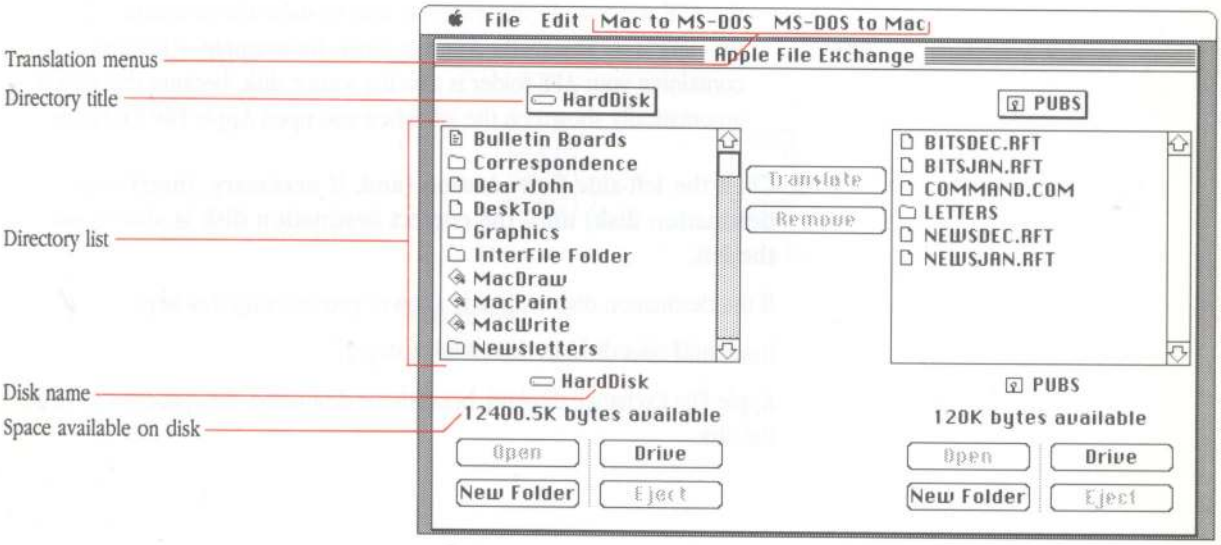


Figure 7-3
Apple File Exchange window

Showing your disks

A **source disk** is a disk containing files you want to translate. A **destination disk** is a disk that you select to receive translated files.

You use the AFE window to select the files you want to translate and to specify the folder you want to receive translated files. You begin by showing both your **source disk** and your **destination disk.**

1. **Click the right-side Drive button and, if necessary, insert your source disk until the source disk is shown on the right side of the AFE window.**

   If you show a Macintosh disk on the right side while a Macintosh disk—either the same one, or another—is shown on the left side, Apple File Exchange presents a translation menu, "Mac to Mac," on the menu bar.

   Once you are working in Apple File Exchange, your Macintosh accepts 3.5-inch ProDOS disks that it would normally eject with an error message such as "This is not a Macintosh disk."

   When you insert a 5.25-inch MS-DOS disk into your Apple 5.25 PC Drive, push down the lever at the front of the drive.

   Click the right-side Eject button if you need to eject a 3.5-inch disk, or remove a 5.25-inch disk manually after lifting the lever on the front of the disk drive. When you eject or remove a disk, its directory list appears dimmed until you reinsert it, insert another disk, or click Drive.

   ❖ *Note:* You can, if you prefer, show the source disk on the left side of the AFE window. In that case, be sure to show the destination disk on the right side. This method makes sense, for example, if the disk containing your AFE folder is also the source disk, because that disk is automatically shown on the left when you open Apple File Exchange.

2. **Click the left-side Drive button (and, if necessary, insert your destination disk) until the correct destination disk is shown on the left.**

   If the destination disk is already shown, you can skip this step.

   Insert and eject disks as described in step 1.

   Apple File Exchange displays, beneath the disk name, the space available on the disk.

Whenever you show an MS-DOS or ProDOS disk in the AFE window, Apple File Exchange presents two translation menus listing translators associated with the two operating systems shown. For example, when the disk shown on the left is a Macintosh disk and the disk shown on the right is MS-DOS, Apple File Exchange shows menus for "Mac to MS-DOS" and "MS-DOS to Mac."

- *Note:* Apple File Exchange is capable of translating files between the two non-Macintosh operating systems. Thus, it is possible to show menus for "MS-DOS to ProDOS" and "ProDOS to MS-DOS." (See "Translating files between MS-DOS and ProDOS" in Chapter 8.)

An icon to the left of each file tells you what it is. (See Figure 7-4.)

- *Note:* If a small lock icon appears next to the directory list of a 3.5-inch or 5.25-inch disk, the disk is locked (write-protected). AFE will not work with a locked destination disk, so unlock the disk before you translate files. To unlock a 3.5-inch disk, eject it and slide the locking tab away from its edge. To unlock a 5.25-inch disk, remove the disk from the drive and remove its locking tab. Then reinsert the disk.

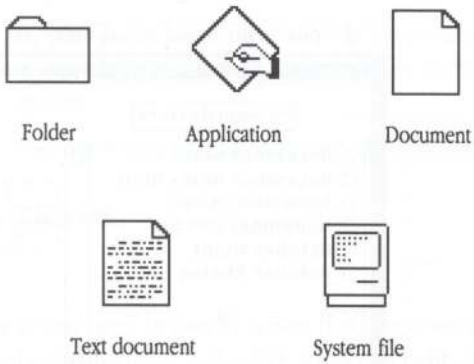


Figure 7-4
Icons identifying files and folders

Specifying where to put translated files

Now you're ready to specify where AFE should put the translated file(s), or **destination file(s).** If you plan to place the destination files in the disk-level directory—that is, not in a folder—you can skip to the next section.

If you want a folder to receive the translated files, you specify that folder as the directory title, just above the destination disk's directory list. As shown in Figure 7-5, the directory title and disk name are initially the same. You can specify an existing folder or create a new folder.

❖ *Note:* Apple File Exchange treats MS-DOS "directories" and ProDOS "subdirectories" as folders, but it does not recognize folders on 400K Macintosh disks. In that case, all files are simply listed in the directory list for the disk.

To specify an existing folder

You can specify an existing folder by moving through your file hierarchy. See the Appendix, "Moving Through the File System," or your *Macintosh System Software User's Guide* for details.

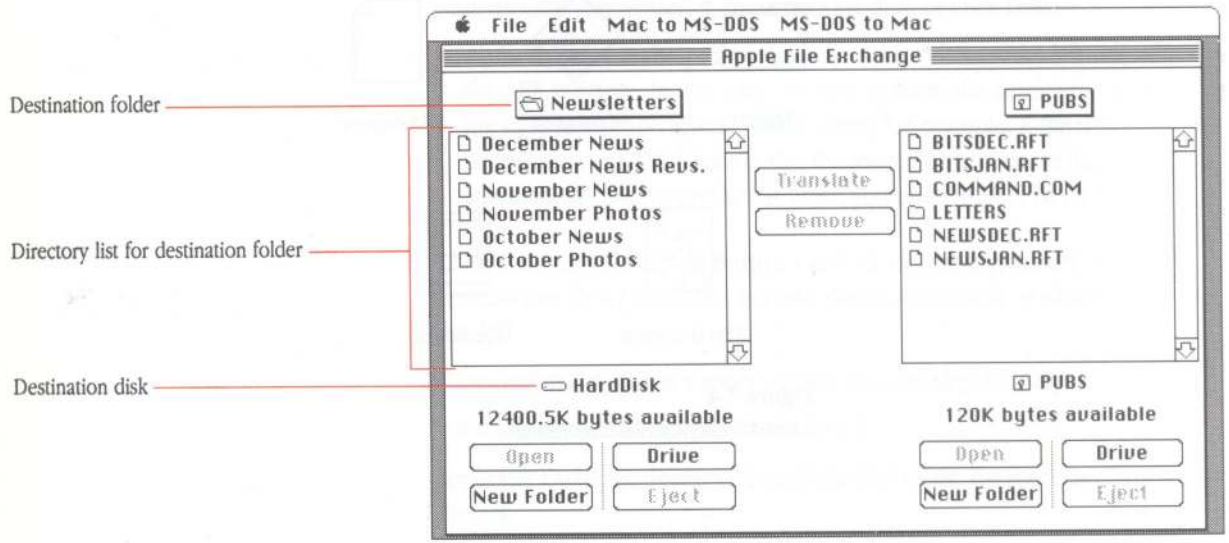


Figure 7-5
Newsletters is specified as the destination folder

To create a new destination folder

Follow these three steps to create a new folder as the destination for your translated files:

1. **Click the New Folder button below the directory.**

   Apple File Exchange presents a dialog box like that in Figure 7-6.

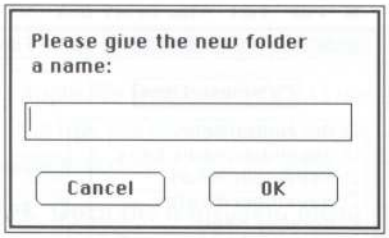


Figure 7-6
The dialog box for naming a new folder

2. **Type a name for the new folder.**

   Apple File Exchange rejects folder names that are too long or that contain characters or sequences not acceptable in the destination disk's operating system.

   Use the mouse and keyboard to edit the folder name.

3. **Click OK.**

Selecting the files you want to translate

Next you need to specify which file(s) you want to translate by displaying and selecting them in the AFE window's right-side directory list. You can select these files individually by their filenames, or you can select all the files in a folder by selecting the folder's name.

1. **Display the directory list containing the files you want to translate.**

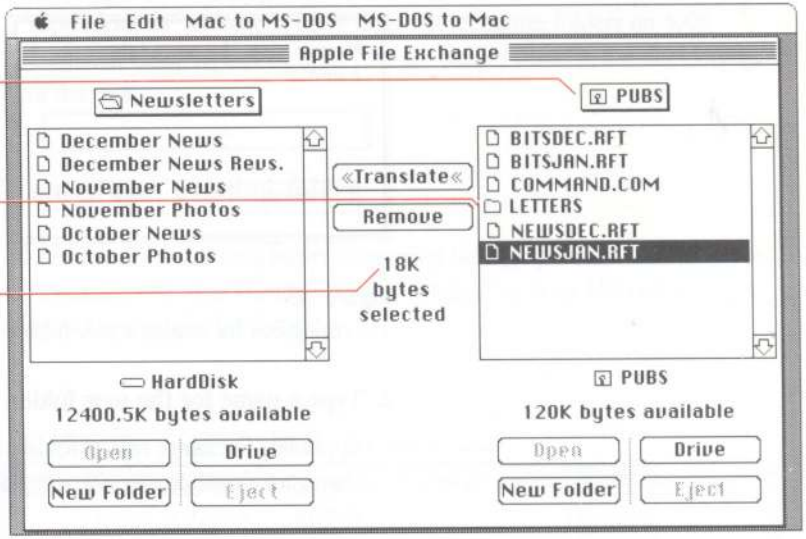
   A directory list contains the names of files or folders contained in the disk or folder shown as the directory title.

   If the files you wish to translate are not shown in the disk directory because they are nested in folders, then open folders until the files are shown in the directory list.

2. **Select the file(s) or folder(s) you want to translate by clicking its name in the directory list.**

A **source file** is any file that you select to be translated, copied, or removed.

Whenever you select one or more **source files,** Apple File Exchange displays, in the center of the AFE window, the total disk space selected. If you're selecting a large number of files, it may take Apple File Exchange several seconds to complete this calculation.



Icon representing a 5.25-inch MS-DOS disk

The folder Letters represents an MS-DOS "directory"

Kilobytes of memory occupied by the selected file

Figure 7-7
The file NEWSJAN.RFT is selected

You can select as many files or folders as you want. Use the first method that follows to select any collection of files and folders. Use the second to select adjacent files and folders.

- **Method 1: Hold down the Command key and click the files or folders you wish to select.**

  All files or folders that you click remain selected.

- **Method 2: Hold down the Shift key and click the first and last files or folders.**

  Those two files or folders, and all of those between them in the window, are selected.

❖ *Note:* If you've selected the entire contents of a disk or folder, there are three simple ways to remove the selection:

- You can select a file in the other directory—if one is shown—in the AFE window. All files in the first directory are deselected.
- You can type any keyboard character except Return. All files except one are deselected.
- You can deselect a single item by clicking it while holding down the Command key.

Making sure the translators you want are active

Apple File Exchange finds and uses the appropriate translators to translate the files you've selected, as long as the translators are in the appropriate translation menu and are active.

1. **Open the translation menu you need by pointing to its title in the menu bar and holding down the mouse button.**

   Each translation menu lists the applicable translators from your Apple File Exchange application and folder. For example, the "MS-DOS to Mac" menu shows all the translators in your AFE folder that translate MS-DOS files to Macintosh documents. If you want to translate Macintosh documents into MS-DOS files, open the "Mac to MS-DOS menu," instead.

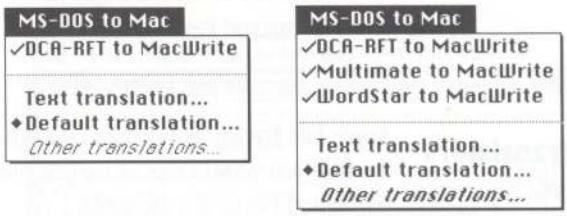
   If you haven't added translator files to the AFE folder, the "MS-DOS to Mac" menu lists "DCA-RFT to MacWrite," "Text translation," and "Default translation."

   Most translator files contain translators for taking a translation in both directions. That is, the DCA-RFT/MacWrite translator file contains a translator for "DCA-RFT to MacWrite" and one for "MacWrite to DCA-RFT."

   One menu item, "Other translations," is not actually a translator, but a command that you use to call upon translators not shown in the menu. See "Translating Files on Your Macintosh Disk" in Chapter 8.

If you've copied into the AFE folder other translator files capable of converting files created with MS-DOS applications programs into Macintosh documents, they are listed alphabetically, along with "DCA-RFT to MacWrite," above the dotted line.

The Text and Default translations always appear below the dotted line.



As shipped

With additional translators

Figure 7-8
Two versions of the "MS-DOS to Mac" menu

2. Make sure that the translators you need are active; if not, select them.

Translators are active—that is, Apple File Exchange can call upon them to translate files—when they are preceded with a check mark or, in the case of the "Default translation," which is always active, a diamond. See "Selecting Translators" in Chapter 8 to learn how to activate and deactivate translators.

Any translator name that is followed by ellipsis points (...) is governed by an options dialog box. For more information, see "Setting Options" in Chapter 8.

Translating files

Now you are almost ready to translate your files. First, however, you should make sure the translated files will fit on the destination disk.

1. **Compare the space selected, as shown in the center of the AFE window, with the space available in the destination disk.**

   The space selected actually gives you only a rough idea of the space that the translated files will take up, since translations frequently alter the length of files.

2. **If there is not enough space, you can do any of the following:**

   - deselect some of your source files
   - use another destination disk
   - select unneeded files on the destination disk and click Remove to delete them

3. **When the space available is sufficient, click the Translate button.**

   If Apple File Exchange finds two or more active translators—other than Text or Default—capable of translating any source file, it presents an alert box like the one shown in Figure 7-9.

   In addition, some translators, from suppliers other than Apple, might not properly distinguish between applications. If two or more translators try to translate a file, even if they are listed with distinct source applications, Apple File Exchange opens the alert box.

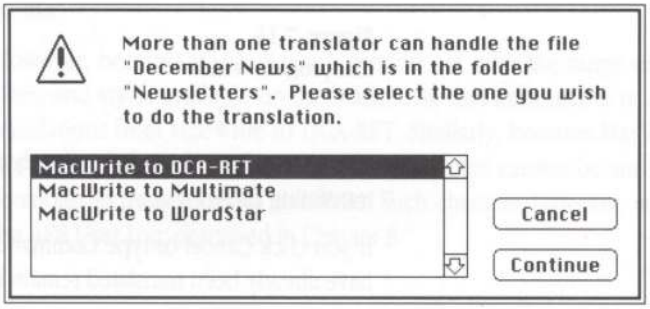

More than one translator can handle the file "December News" which is in the folder "Newsletters". Please select the one you wish to do the translation.
MacWrite to DCA-RFT
MacWrite to Multimate
MacWrite to WordStar
Cancel
Continue

Figure 7-9
The alert box for conflicting translators

If the alert box appears, select the translator you want and click Continue. To learn other ways you can select translators, see "Selecting Translators" in Chapter 8.

If the names of destination files or folders conflict with existing files or folders, or with each other, Apple File Exchange warns you and allows you to change the destination names. (See "Resolving Filename Conflicts" in Chapter 8.)

When there are no conflicting translators or filenames, Apple File Exchange translates the selected files. As each file is translated, the progress window shows the source filename, its destination filename, and the translator. For each file, the horizontal bar reports what percentage of the current translation is complete. Entries at the bottom of the window tell how many files you selected and how many files have been translated. The progress window is shown in Figure 7-10.

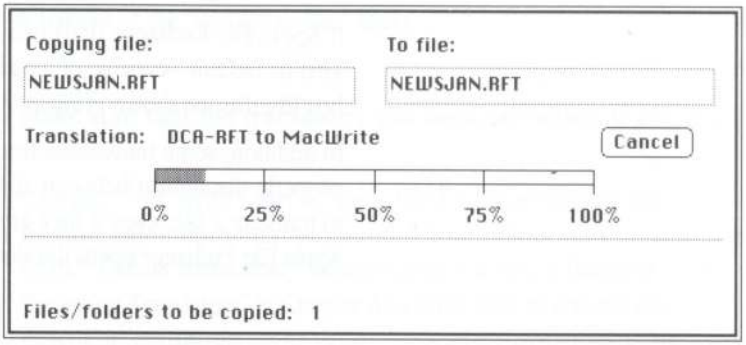


Figure 7-10
The progress window

The progress window closes shortly after Apple File Exchange is finished translating files.

If you click Cancel or type Command-period, translation is halted. Files that have already been translated remain in the destination folder or disk.

Finishing up

Once you have completed a translation, you can start setting up another one, or you can quit Apple File Exchange.

- **Choose Quit from the File menu window to return to the Finder.**

  Whenever you quit Apple File Exchange, 5.25-inch MS-DOS disks are no longer recognized by your Macintosh—for example, they are not shown on your desktop—and 3.5-inch ProDOS disks are ejected automatically.

What translators do

Once you have translated your files, it makes sense to open them—on the appropriate computer—to see what they now look like. If you have the right computer, you should be able to work with any translated file, but the accuracy and completeness of translation varies, depending upon three factors:

- the differing structures of the source and destination operating systems
- the similarities and differences between the source and destination applications
- the quality of the translator software

The translation between DCA-RFT and MacWrite, described in detail in Chapter 8, illustrates both the benefits and limitations of translation, even when the translator program is well written. In either direction, the translators preserve text and essential format instructions, such as paragraph breaks.

However, because MS-DOS computers do not offer the range of type fonts, sizes, and styles available on the Macintosh, that information is lost in translations from MacWrite to DCA-RFT. Similarly, because MacWrite does not have a footnote feature, DCA-RFT footnotes cannot be shown as footnotes in translations to MacWrite. Such changes, however, are noted in the AFE User Log, described in Chapter 8.

Frequently, you can quickly restore documents to their original shape after translation. For example, although the "DCA-RFT to MacWrite" translator does not preserve the centering of text, you can use rulers or the Align Center command (Command-M) from the MacWrite Format menu to center sections or lines of text.

As you familiarize yourself with the Apple file exchange utility, the translators you've obtained, and the applications you're using, you'll find that nearly all the information you need is translated intact from computer to computer. And you can fine-tune afterwards whatever differences appear as a result of translation.

- *Note:* You can learn about the features of specific translators either from printed guides that accompany translator files or from the About Apple File Exchange window, which is described in "Selecting Translators" in Chapter 8.

CHAPTER 8

Apple File Exchange: Advanced Features

IN THIS CHAPTER YOU LEARN HOW TO USE SOME OF THE APPLE FILE EXCHANGE application's more complex features, including

- how to select the translators you want to use
- how to let Apple File Exchange (AFE) select the source files when you've selected the translators
- translating MS-DOS and ProDOS files that you've already copied onto a Macintosh disk
- resolving filename conflicts
- using the AFE User Log to keep track of your activity
- setting the options for specific translators
- how to save translator selections and options settings for future use

You also learn some specifics about the "DCA-RFT to MacWrite" and "MacWrite to DCA-RFT" translators introduced in Chapter 7.

Selecting translators

In Chapter 7 you learned how to set up the AFE window so that the Apple file exchange utility would use the translator appropriate for each source file that you select. Apple File Exchange asked you to decide among translators only if two or more translators were capable of translating any given file. When using this method, all translators must be active—that is, preceded by a check mark or, in the case of the default translation, a diamond.

At times, however, you may want to select the translators yourself. Perhaps you're tired of seeing the alert box that warns you of conflicting translators. Or maybe you want to select a translator so that Apple File Exchange can select the source files, as explained in the next section.

To select translators

Make sure that the translators you want are active and that the ones you don't want are inactive.

- **To activate an inactive translator (one without a check mark), drag down the translation menu and release the mouse button when the pointer is on the name of the translator.**

  The check mark is added.

  When you activate a translator that is followed by ellipsis points (...), the Apple file exchange utility presents an options dialog box. See "Setting Options" later in this chapter.

- **To deactivate an active translator, drag down one of the translation menus and release the mouse button when the pointer is on the name of the translator.**

  The check mark is removed.

Once you activate or deactivate translators, those setting are retained, even if you change menus, until you change the settings or quit Apple File Exchange. To save the settings for future use, see "Saving and Restoring Settings" later in this chapter.

Menus displayed in windows

If you plan to activate or deactivate several translators at once, you can save time by turning any translation menu into a window. Simply drag down past the bottom of the menu. A window containing the menu appears when you release the mouse button. You can drag the window by its title bar. Activating another window may hide it, but you can make it reappear by dragging down past the menu again. You close the menu by clicking its close box or by selecting a disk from a different operating system, which results in a different set of menus.

When a menu is shown in a window, you can click any translator to activate or deactivate it. You can show one or two menus at a time by turning them into windows.

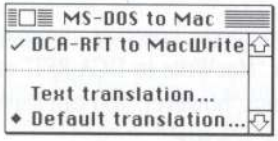


Figure 8-1
A menu in a window

How Apple File Exchange uses translators

The next time you translate files, the file exchange utility looks at the active translators above the dotted line in the appropriate menu. (The appropriate menu is the one that shows the source disk's operating system and then the destination disk's operating system.)

If none of the active translators above the dotted line can translate a source file, Apple File Exchange considers a text translation if the "Text translation" translator is active.

- With Macintosh and ProDOS source files, Apple File Exchange selects "Text translation" only if a document has been saved as a text file—that is, "text only" on the Macintosh or "TXT" on the Apple II.
- With MS-DOS files, Apple File Exchange selects the text translator if most of the characters in a source file are readable keyboard characters.

If no other translator is capable of transferring a file from one operating system to another, Apple File Exchange uses the default translation to make a copy in binary code. If you use the default translation to copy an MS-DOS or ProDOS file to your Macintosh disk, you may later be able to obtain translators to convert the file into a useful document. (See "Translating Files on Your Macintosh Disk" later in this chapter.)

- *Note:* The Apple file exchange utility shows and uses only those translators that are contained in translator files shown in the AFE folder. Thus, you can remove translators from the translation menus by dragging their respective translator files out of the AFE folder.

  You can also hide translators by using the Finder to create a new folder—call it something like Extra Translators—within the AFE folder and then dragging into it translator files you don't need now.

  These methods, however, remove translators going in both directions, such as "MacWrite to DCA-RFT" and "DCA-RFT to MacWrite." Working in the menus, however, you can leave one translator inactive while the converse is active.

To learn about translators

Many translators contain brief descriptions of their functions. To view those descriptions, follow these simple steps:

1. **Choose About Apple File Exchange from the Apple menu (or press Command-A).**

   The About Apple File Exchange window, containing a list of translators, appears. See Figure 8-2.

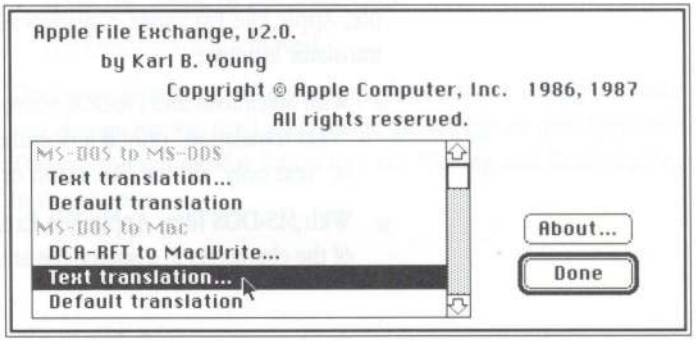


Figure 8-2
The About the Apple File Exchange window

2. **Select any translator, and then click the About button to display a description of that translator.**

3. **Click the Done button or press Return to close the About Apple File Exchange window.**

Letting AFE help select the source files

A file is **eligible** if it can be translated with a selected translator.

At times, you may know which translator(s) you plan to select, but not know which files are **eligible** for that translation. For example, you may wish to convert all WordStar files on your MS-DOS disk into MacWrite documents, but you don't have the time to figure out which of your MS-DOS files were written with WordStar.

Apple File Exchange is designed to figure it out for you. Follow these steps to select eligible source files.

1. **Show the source and destination disks in the AFE window.**

   See "Showing Your Disks" in Chapter 7.

2. **Unless you plan to translate files into the destination disk's disk-level directory, specify the destination folder in the AFE window.**

   See "Specifying Where to Put Translated Files" in Chapter 7.

3. **Select the desired translator(s) in the appropriate translation menu.**

   See the previous section, "Selecting Translators." The appropriate menu is the one with the operating system from which you want to copy shown first.

4. **Choose Show Only Eligible Files from the File menu or press Command-E.**

The command is checked until you choose it (or press Command-E) again.

In both directory lists, Apple File Exchange dims the names of files that cannot be translated with the selected translator(s). Because the folders shown in the directory lists might contain eligible files, they are not dimmed.

To have Apple File Exchange search the folders shown in the directory lists (and folders nested in those folders) for eligible files, hold down the Option key while choosing Show Eligible Files. Apple File Exchange dims those folders that do not contain eligible files. If your folders contain a large number of files, this can be a time-consuming process.

When you select a folder that isn't dimmed and then click Translate, all eligible files contained in that folder (and nested folders) are translated. This is true as long as the Show Eligible Files feature is turned on (checked), whether or not you held down the Option key while choosing the Show Eligible Files command.

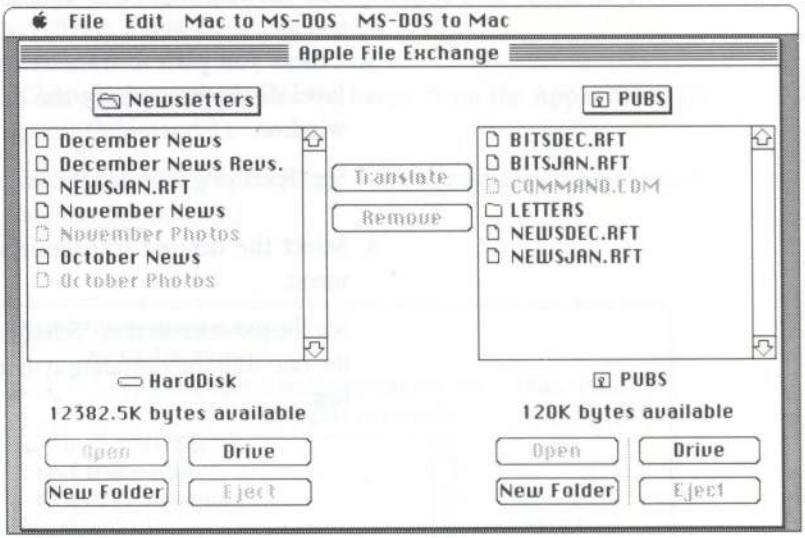


Figure 8-3
Eligible files are not dimmed

5. **In the source disk directory list, select all files and folders that are not dimmed.**

   When you select folders that contain both eligible and ineligible files, Apple File Exchange will translate only the eligible files, as long as the Show Only Eligible Files command is checked.

   ❖ *Note:* The Show Only Eligible Files command does not show as eligible those files that can be translated only with the text or default translations. Use this procedure, therefore, if you don't want any text or default translations.

6. **Continue by clicking the Translate button.**

   See "Translating Files" in Chapter 7 for a description of the rest of the translation process.

Translating files on your Macintosh disk

Thus far, you've learned how to use the Apple file exchange utility to exchange files between your Macintosh and MS-DOS or ProDOS disks.

You can also use Apple File Exchange to translate MS-DOS and ProDOS files that are already on one of your Macintosh disks, but which cannot be "read" by Macintosh applications—except Apple File Exchange. You may have obtained those untranslated files in many ways: through a telephone line, over a network, or even by using Apple File Exchange's default (binary) translator.

And you can use Apple File Exchange to create MS-DOS and ProDOS files on your Macintosh disk, so you can send them to an Apple II or an MS-DOS computer.

This feature is particularly valuable if you have a disk, such as a 5.25-inch ProDOS disk, that cannot be used by your Macintosh, but you can transfer files in some other way—such as over a telephone line.

Between applications

You can use application-specific translators to translate to or from MS-DOS or ProDOS files stored on your Macintosh disk. Follow these steps:

1. **Select the destination folder or disk and the source files in the AFE window.**

   Since both the source and destination disks are Macintosh disks, the "Mac to Mac" menu appears.

2. **Choose "Other translations" in the "Mac to Mac" menu.**

   A dialog box appears.

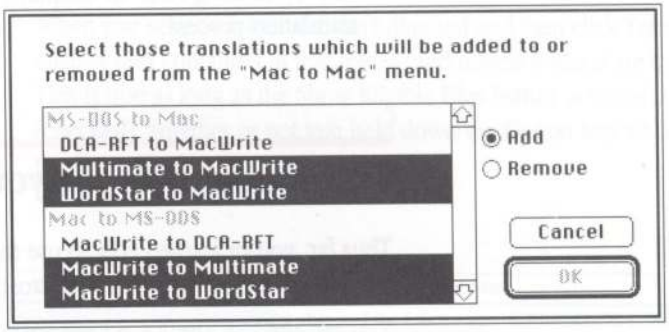


Figure 8-4
A typical "Other translations" dialog box

3. **Make sure the Add button is selected.**

   A scrollable list, listing translators by translation menu, is displayed.

   You can select and add to the "Mac to Mac" menu any translator that is not dimmed. Any translator that you've already added to a menu is dimmed in the list of translators for the menu to which you've added it. However, you can still select that translator in the list for the menu where it normally appears.

4. **Click to select the translators you want to add to the "Mac to Mac" menu, and click OK.**

   Hold down the Shift key or Command key to select more than one translator.

   The next time you use the "Mac to Mac" menu, the translators you selected appear just above "Text translation."

   If you save your settings, the added translators are shown in the menu whenever you restore those settings. (See "Saving and Restoring Settings" later in this chapter.)

   ❖ *Note:* You can use the same procedure to add translators to any translation menu.

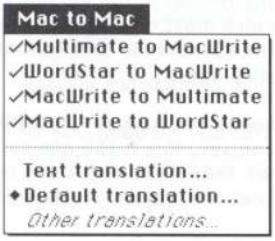


Figure 8-5
The "Mac to Mac" menu with added translators

5. **Make sure the translators that you want to use are active.**

6. **Click the Translate button.**

   See "Translating Files" in Chapter 7 for a description of the remainder of the translation process.

❖ *Note:* To remove an added translator from a translation menu, choose "Other translations" in that menu and make sure that the Remove button is selected in the dialog box that appears. You can remove any translator that is not dimmed—that is, any added translator listed under the name of the menu to which you've added it. However, translators are now dimmed in the list for the menu where they normally appear; this means they can't be removed from that menu. Click to select the translator that you want to remove, and click OK. Hold down the Shift key or Command key while clicking other translators if you want to remove more than one translator.

As text

The "Mac to Mac" menu always contains a text translator, which you can use to translate Macintosh text files to or from MS-DOS or ProDOS text files stored on your Macintosh disk. Use it to clear up differences in the way the different operating systems format text. Unless you reset its options, however, Apple File Exchange uses this translator to make a straight Macintosh copy. (See "Setting Options" later in this chapter.)

To reset the options, follow these steps:

1. Open the "Mac to Mac" text translation options dialog box.

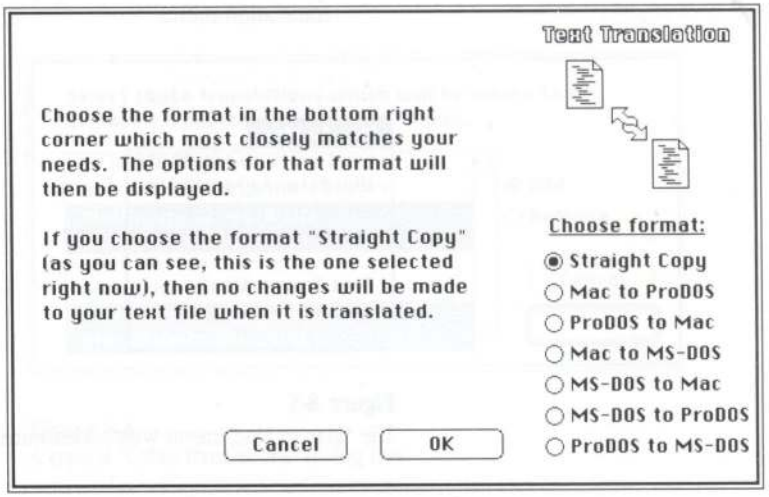

Text Translation
Choose the format in the bottom right corner which most closely matches your needs. The options for that format will then be displayed.
If you choose the format "Straight Copy" (as you can see, this is the one selected right now), then no changes will be made to your text file when it is translated.
Choose format:
Straight Copy
Mac to ProDOS
ProDOS to Mac
Mac to MS-DOS
MS-DOS to Mac
MS-DOS to ProDOS
ProDOS to MS-DOS
Cancel
OK

Figure 8-6
The "Mac to Mac" text translation options dialog box

2. Select the text translation corresponding to your source and destination operating systems.

The options dialog box associated with that translation appears.

For example, if you want to send a translated Macintosh text file to an MS-DOS computer as an MS-DOS text file, select "Mac to MS-DOS." Among other features, this lets you add a line feed to each carriage return so it's interpreted correctly.

3. Reset the options, if necessary.

4. Click OK.

Translating files between MS-DOS and ProDOS

You can use the Apple file exchange utility to translate MS-DOS files into ProDOS files, and vice versa. In this case, your Macintosh serves as a bridge linking the two other operating system.

- If you want to use application-specific translators, in most cases you'll need to translate from the source operating system to a Macintosh file, and then translate again from the Macintosh file to the destination operating system. You are unlikely to find translator files containing "MS-DOS to ProDOS" or "ProDOS to MS-DOS" translators.
- If you want to make a text translation or a binary copy, show one non-Macintosh disk as your source disk and one from the other non-Macintosh operating system as your destination disk. The "MS-DOS to ProDOS" and "ProDOS to MS-DOS" menus, containing both text and default translations, appear automatically.
- If you need to, you can choose "Other translations," from either the "MS-DOS to ProDOS" or "ProDOS to MS-DOS" menu, to add translators to those menus.

Resolving filename conflicts

In using Apple File Exchange, you may run into one of the three following situations in which destination filenames conflict with other file and folder names. In each situation, you see an alert box after you click Translate.

- A destination file has the same name as an existing folder (or a destination folder has the same name as an existing file) in the destination directory.

  An alert box allows you to click the Rename button to display a window in which you can create a new name for the destination file or folder. You can also click Cancel to cancel the translation.

- Two destination filenames or folder names are the same. This can happen if you are converting Macintosh files to MS-DOS or ProDOS. Those file systems do not allow filenames as long as those allowed on the Macintosh, and they do not recognize characters allowed in Macintosh filenames. Consequently, sometimes the Macintosh filenames are truncated or altered, turning similar source filenames into duplicate destination filenames.

  An alert box allows you to click the Rename button to display a window in which you can create a new name for the destination file or folder. You can also click Cancel to cancel the translation.

- A destination file has the same name as an existing file (or a destination folder has the same name as an existing folder) in the destination directory.

  An alert box allows you to click the Rename button to display a window in which you can create a new name for the destination file or folder. You can also replace the existing file (or folder) with the new translated file, or you can click Cancel to cancel the translation.

When you need to rename a file, click Rename in whichever alert box Apple File Exchange presents. The Rename window appears. (See Figure 8-7.)

❖ *Note:* If you anticipate conflicts, or want to change filenames for any other reason, you also can activate the Rename window before clicking Translate by choosing Rename Destination Files from the File menu.

The Rename window lists the source files and folders that you selected in the window. You can scroll the list, open folders, and move toward the disk directory using the techniques described in your Macintosh owner's guide.

For each file or folder, there is space for a symbol identifying a naming conflict.

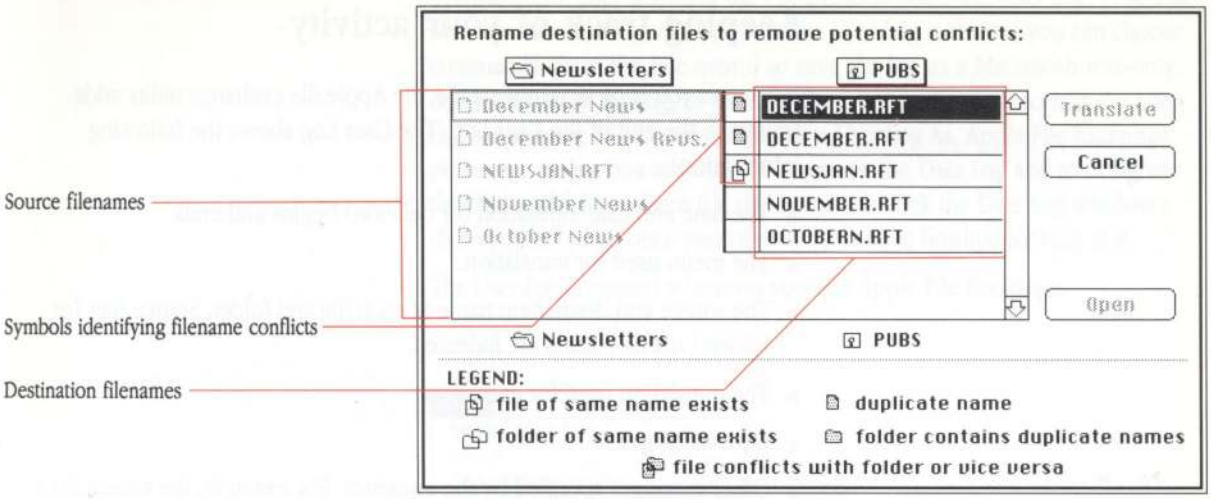


Figure 8-7
A typical Rename window

To the right of each source file or folder name, the corresponding destination file and folder names are displayed. The source and destination names are scrolled together.

When you first activate the Rename window, the destination name is the same as the source name or a slightly altered or truncated version. To change destination names, follow these steps:

1. **Select any destination filename.**

   You can select the next destination filename on the list by pressing the Tab key, and you can select the previous listing by holding down the Command key while pressing the Tab key.

2. **You can edit the selected destination filename by using the mouse and keyboard in the standard Macintosh fashion.**

3. **Click Translate to confirm your changes.**

   This closes the Rename window and restarts (or starts) the translation process, using the new destination filenames.

   If you click Cancel, AFE changes no filenames and translates no files. The Rename window closes, and you return to the AFE window.

Keeping track of your activity

Whenever you copy or remove a file, the Apple file exchange utility adds listings to the end of the User Log. The User Log shows the following information:

- The time and date translation (or deletion) begins and ends.
- The menu used for translation.
- The source and destination name of each file and folder. Source files (or folders) *within* folders are indented.
- The translation used for each item.
- Error messages.
- Other messages specified by the translator. For example, the entries for a translation from MacWrite may list fonts and character styles that couldn't be carried over into MS-DOS or ProDOS files.

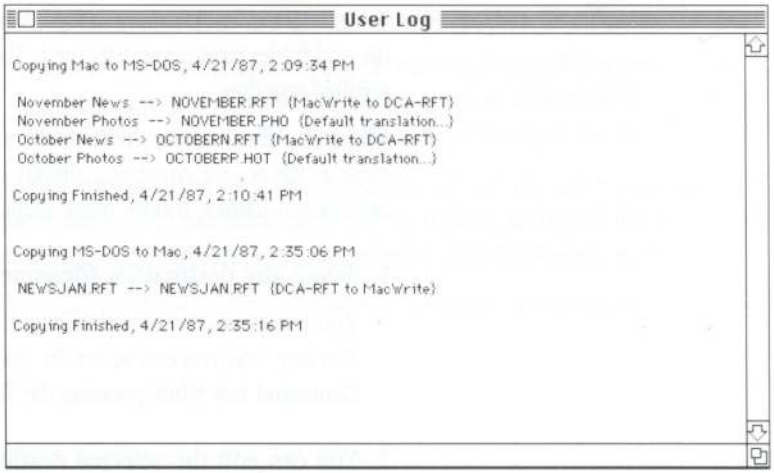

User Log
Copying Mac to MS-DOS, 4/21/87, 2:09:34 PM
November News --> NOVEMBER.RFT (MacWrite to DCA-RFT)
November Photos --> NOVEMBER.PHO (Default translation...)
October News --> OCTOBERN.RFT (MacWrite to DCA-RFT)
October Photos --> OCTOBERP.HOT (Default translation...)
Copying Finished, 4/21/87, 2:10:41 PM
Copying MS-DOS to Mac, 4/21/87, 2:35:06 PM
NEWSJAN.RFT --> NEWSJAN.RFT (DCA-RFT to MacWrite)
Copying Finished, 4/21/87, 2:35:16 PM

Figure 8-8
Sample entries in the User Log

Choose Show User Log from the File menu to show the User Log. (The File menu is shown in Figure 8-9.) Once the User Log is shown, you can choose commands (from the File menu) to save the log as a Macintosh text-only document, print the log, or clear it. Choose Page Setup to format the User Log for printing. When you choose Save User Log As, Apple File Exchange presents a dialog box allowing you to name the User Log and to designate the disk and folder where it it will be saved. Click the User Log window's close box to hide it once you've saved it or have finished looking at it.

The User Log is cleared whenever you quit Apple File Exchange.

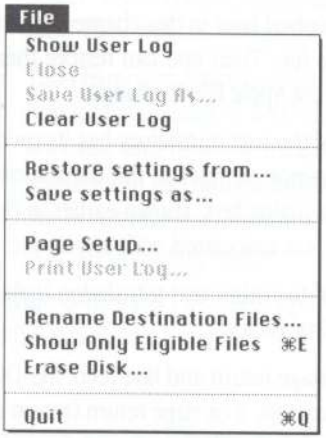


Figure 8-9
The File menu in Apple File Exchange

Setting options

Whenever you activate a translator that is followed by ellipsis points (...) in one of the translation menus, Apple File Exchange presents an options dialog box for that translator. You can also show an options dialog box for a translator that is already active by clicking the name of the translator while holding down the Option key.

The authors of each translator have preset the options in what they consider useful settings, but you can change them. Apple File Exchange saves the new settings until you change them again or quit AFE.

As described later in this chapter, you can save the settings in a special settings file. Then you can restore them at any time, even after quitting and reopening Apple File Exchange.

Each of the text translators has its own options dialog box, allowing you to make minor changes in the translation. The "Mac to Mac" text translation options dialog box, shown earlier in Figure 8-6, lets you activate the options dialog box associated with any of the other text translations.

Each of the other text translation dialog boxes raises two or three of the four following issues:

- Carriage return and line feed. MS-DOS computers generally use two characters, a carriage return (return character) and a line feed, to end a line, but the Macintosh and Apple II use just a carriage return. All text translators are preset to establish this correspondence.
- Special characters. Certain Macintosh characters, which you can type while holding down the Option key, are not normally shown on MS-DOS or ProDOS computers. Similarly, certain MS-DOS characters are not used in the other two operating systems.

  When using a text translator to translate Macintosh documents or MS-DOS files, Apple File Exchange automatically selects the Neither button. Use this setting if you don't want to lose the special characters when you retranslate a document back into its original operating system.

  Select "Change to closest single character" to have AFE substitute the character that is the closest equivalent of the special character—such as 'Y' for '¥'.

  Select "Change to multiple characters" if you want to break up accented characters into the closest equivalent character and the accompanying accent.

On the Apple II and MS-DOS computers, a **control character** is a nonprinting character that controls or modifies the way information is printed or displayed.

- Control characters. The Macintosh does not generally recognize **control characters.**

  When using a text translator to translate a ProDOS file, Apple File Exchange automatically selects the Neither button. Use this setting if you don't want to lose the control characters when you retranslate a document back into a ProDOS file. When you open the translated document on your Macintosh, each character will probably be represented by a rectangular outline.

  Select "Remove unnecessary control characters" to remove them from the translated files.

  Select "Make control characters visible" to show them in the translated files. They will be preceded by an upward-pointing arrow.

- Tab characters. Since translation does not necessarily preserve the horizontal spacing of text, all of AFE's text translators allow you to reset tab stops and have the translator replace multiple spaces with a tab character in the translated file. Select "Neither" if you don't want to lose the horizontal spacing when you retranslate the document back into its original operating system.

Figure 8-10 shows a typical options dialog box for the text translator in the "MS-DOS to Mac" menu.

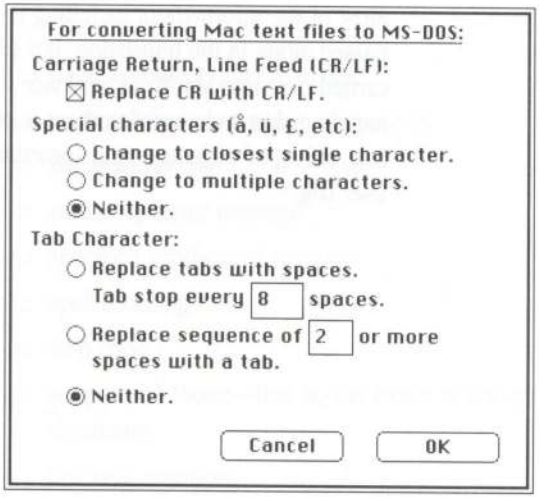

For converting Mac text files to MS-DOS:
Carriage Return, Line Feed (CR/LF):
Replace CR with CR/LF.
Special characters (å, ü, £, etc):
Change to closest single character.
Change to multiple characters.
Neither.
Tab Character:
Replace tabs with spaces.
Tab stop every 8 spaces.
Replace sequence of 2 or more spaces with a tab.
Neither.
Cancel
OK

Figure 8-10
The "MS-DOS to Mac" text translation options dialog box

To change settings, follow these steps:

1. **Click the appropriate buttons or check box.**

2. **Type in numbers where necessary.**

3. **Click OK to confirm and close the options dialog box.**

The new settings remain until you change them again or quit Apple File Exchange. You can save them for further use by choosing the Save Setting As command from the File menu. (See "Saving and Restoring Settings" later in this chapter.)

The DCA-RFT translators

The AFE folder on your *Utilities* disk contains one translator file, DCA-RFT/MacWrite, which contains two translators, "DCA-RFT to MacWrite" and "MacWrite to DCA-RFT." You use the former to convert MS-DOS word processing files—such as those created with DisplayWrite 3 or DisplayWrite 4—that have been saved in Document Content Architecture/Revisable Form Text (DCA-RFT) format into MacWrite documents. You use the latter to convert MacWrite documents to DCA-RFT.

Most of the information, including format instructions as well as text, is passed along in the translation, but some features of DCA-RFT cannot be carried over into MacWrite, and vice versa. In some cases the translator merely makes a change. In others, it generates a message in the AFE User Log, telling of a change. And sometimes it even shows omitted text in the User Log.

DCA-RFT to MacWrite

When you use the "DCA-RFT to MacWrite" translator to create a MacWrite document, the translated file does not fully become a MacWrite document until you open it. If you plan to retranslate the document into a DCA-RFT file, open and then save the file *before* carrying out the reverse translation.

Features omitted

The following features of DCA-RFT are omitted or ignored when a DCA-RFT file is translated into MacWrite:

- automatic hyphenation
- backspacing in left margin
- character realignment within paragraphs
- different header/footer for even pages
- footnote formatting
- line end zone (right sub-margin)
- line numbering
- maximum/minimum number of lines per page
- move/copy column to second column
- multiple headers and footers per document
- multiple-line headers/footers
- overstriking
- page increment other than one
- page number reset within documents
- paragraph keeps
- printer operator message
- specified top/bottom margins
- spell checking
- stop code
- suppressed footer—that is, the footer is always shown in the translated document
- text unit insertion
- text unit number
- visual attributes such as blinking, reverse video, and no-display

Features changed

The following features of DCA-RFT are changed when a DCA-RFT file is translated into MacWrite:

- Automatic page numbering is shown only at the right edge of the top line of the header or footer.
- Centered or right-justified text is left-justified from a tab stop or the margin. Use the ruler or alignment commands from the Format menu to restore right-justification or centering.
- The distance between margins, which has no minimum in DCA-RFT, is expanded to MacWrite's minimum two inches.
- Double underlining is changed to single underlining.
- Horizontal spacing changes with type size. When converted text goes past the next tab stop, a tab skews the text. This is easily solved by widening the tab spacing.
- Outlines are identified by messages telling the level number of each line. You can convert any such line by adding as many MacWrite tabs as the level number for each line.
- Special characters—such as backspaces and the null character—are replaced by rectangular outlines.
- Suppressed headers in DCA-RFT cause MacWrite to suppress both the header and footer for the page.
- Tab stops are accepted by MacWrite only up to the first ten. Comma-aligned tabs are converted to decimal tabs; colon tabs are converted to left-justified tabs.
- Type fonts and sizes are approximated.
- Vertical line spacing is approximated.
- Vertical tabs are converted to carriage returns.

MacWrite to DCA-RFT

Some features that are kept when a MacWrite file is translated into DCA-RFT may be lost when the DCA-RFT file is subsequently converted into a word processor file. For example, the "MacWrite to DCA-RFT" translation retains line breaks and page breaks, but that information is not kept when the file is converted to DisplayWrite 3 or DisplayWrite 4. To format your document correctly, use DisplayWrite's Paginate Document command. The Paginate Document command is found in the main (Text Task Selection) menu of DisplayWrite 3. In DisplayWrite 4 you can show a menu containing the Paginate Document command either by pressing Control-F7 or choosing the End/Save command (F2).

Similarly, the "MacWrite to DCA-RFT" translation retains the format of centered and right-justified text, but that text may be left-justified when the file is converted to DisplayWrite 3 or DisplayWrite 4. You can easily change the justification after translation.

In addition, the DCA-RFT translation does not limit the size of headers and footers, but the conversion to DisplayWrite 3 or DisplayWrite 4 does.

Features omitted

The following features of MacWrite are omitted when a MacWrite file is translated into DCA-RFT:

- date and time in header or footer
- graphics
- hanging indents

Features changed

The following features of MacWrite are changed when a MacWrite file is translated into DCA-RFT:

- Automatic page numbering is shown only at the right edge of the top line of the header or footer.
- Centered text that was centered using MacWrite's ruler is left-justified after translation. However, text centered using the Align Center command in the Format menu is centered after translation.
- Horizontal spacing changes with type size. When converted text goes past the next tab stop, a tab skews the text. This is easily solved by widening the tab spacing.

- Italic, outline, and shadow type styles are changed to bold.
- Paragraph indents are changed to two spaces. To get full indents, use tabs.
- Type fonts and sizes are approximated, except for large sizes, which are reduced.
- Unrecognized characters are represented by the underscore character.
- Vertical line spacing is approximated.

Saving and restoring settings

In this chapter you have learned how to activate and deactivate translators in the translation menus, to add other translators to the menus, and to set translation options. All such settings remain until you change them or quit Apple File Exchange.

To save yourself time in the future, you can save the current settings simply by choosing Save Settings As from the File menu. This saves in one special file the settings in all the option dialog boxes and translation menus, including check marks and added translators.

Whenever you are ready to use those settings, choose the Restore Settings From command from the File menu.

When you choose Save Settings As, Apple File Exchange presents a dialog box allowing you to name the settings file and to designate the disk and folder where it is saved. (See Figure A-2 in the Appendix, "Moving Through the File System," for an example.) When you choose Restore Settings From, Apple File Exchange presents a dialog box allowing you to select the settings file of your choice.

CHAPTER 9

Map

MAP IS A MACINTOSH UTILITY THAT RECORDS AND DISPLAYS THE LONGITUDE and latitude of locations anywhere in the world. If you want to phone someone in Paris, Tokyo, or any other place, you can use Map to tell what time it is there. If you plan to travel to Detroit, Jerusalem, or some other destination, you can determine the shortest (great circle) distance to that point. And if you're moving your Macintosh from one location to another, you can use Map to reset your Alarm Clock desk accessory.

With Map, you can set the Current Location, which is stored in your Macintosh just like the time and date. You can call upon that location from application programs or from HyperCard™.

You can use Map on the Macintosh Plus, Macintosh SE, or Macintosh II, as long as you are using a current or recent version of Macintosh system software with a modular Control Panel.

Installing Map

Map is found on *Utilities* disk 1. It is identified by the globe icon.

To use Map for the first time, you install a copy of the Map utility in the System Folder on the disk that you plan to use as your startup disk. Follow these steps.

1. **Start up your Macintosh using the startup disk that you want to use with Map.**

2. **Make sure the System Folder is visible.**

3. **Insert *Utilities* disk 1.**

4. **Copy Map into the System Folder by dragging the icon representing Map onto the System Folder on your startup disk.**

❖ *Note:* For more on startup disks, designating the startup device, and startup procedures, see your *Macintosh System Software User's Guide* or Chapter 1, "Apple HD SC Setup," in this manual.

Opening Map

Map appears as a window in the Control Panel desk accessory. You can open Map while working in the Finder or any application. Follow these steps.

1. **Choose Control Panel from the Apple menu.**

2. **If Map is installed, but the Map icon is not visible on the left, scroll it into view.**

3. **Click the Map icon.**

   The Map window, containing a Plate Carrée projection, appears (see Figure 9-1).

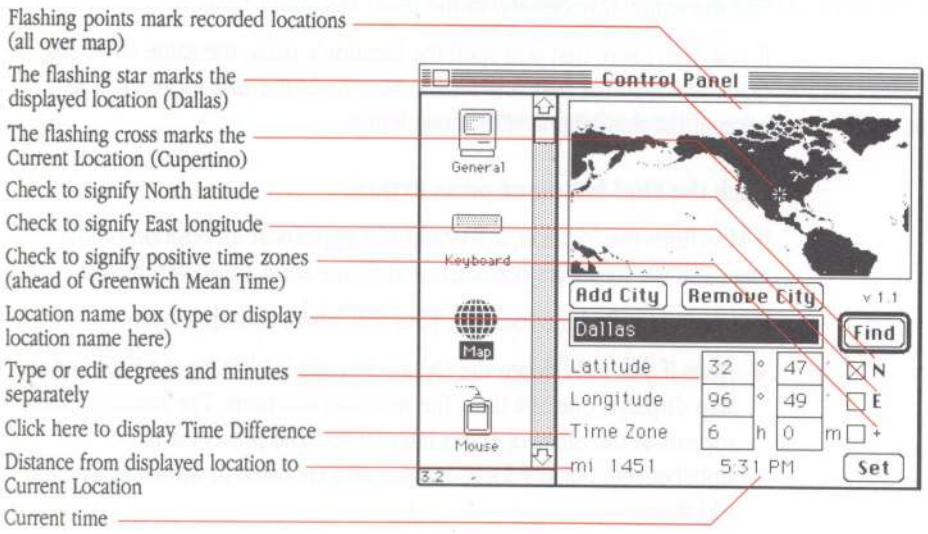


Figure 9-1
The Map window in the Control Panel

❖ *Note:* If you want a magnified map image (showing less of the world, at larger scale), hold down the Option button while clicking the Map icon. To return to the normal scale map, close and reopen Map.

Finding a location

The Map utility contains preset coordinates for many of the world's largest cities, and in the next section you'll learn how to add even more locations. You can find any recorded location by using either of the following two methods:

Finding a location by its name

All recorded locations are identified by a name. If you know the name and the correct spelling for a city or other location that you want to find, use this method.

1. **Type the name of the location.**

   Edit the name, if necessary, in the usual Macintosh fashion.

   If you aren't sure that you spell the location's name the same way Map does, just type the first few letters. Map finds the first location in its internal list that begins with those letters.

2. **Click the Find button or press Return.**

   If Map finds the location, a flashing star appears at its position on the map, and the location's coordinates and time zone are shown below.

   If Map cannot find the location, your Macintosh sounds a beep.

   ❖ *Note:* If you hold down the Option key while clicking the Find button, Map displays, one at a time, the recorded locations. The location names appears in the order of Map's internal list. The preset list is alphabetized, but any locations you add are listed in the order that you add them.

Finding a location using the map

All recorded locations are also identified by small flashing points at their positions on the map. (If you hold down the mouse button while the map is selected, the flashing speeds up.)

If you don't know the name of a location, but you know generally where it is, use this method to find a location.

1. **If the portion of the map that contains the location you are seeking is not visible, scroll it into view by clicking near any of the map's edges and dragging outside.**

   Drag away from the edge to speed scrolling.

2. **Click near the location you are seeking, and drag to it.**

   As soon as the pointer touches a point marking a recorded location, a flashing star replaces the point. The location's name, coordinates, and time zone are shown below.

   If the wrong location name appears, try again. There is no guarantee, however, that the location you are seeking is prerecorded in Map.

Adding, changing, and removing locations

Unless the Map file is locked, you can alter Map's list of recorded locations by adding, changing, or removing individual locations.

To add a location

If you want to add a location that is not prerecorded in Map, follow these steps:

1. **If the portion of the map that contains the location you're adding is not visible, scroll it into view by clicking near any of the map's edges and dragging outside.**

2. **Click at the position of the location.**

   A flashing star appears at the position, and its coordinates and approximate time zone are displayed below.

   You can use an existing recorded location, but you can't change its coordinates without changing its name or removing it first.

3. **Type the name of the location.**

   If necessary, first select the location name box.

   You can edit the name in the usual Macintosh fashion.

4. **If the position is not accurate enough, select the latitude or longitude, and type new coordinates.**

   You can edit both the latitude and longitude in the usual Macintosh fashion. Type or edit degrees separately from minutes. Click to check the compass check boxes to signify north latitudes and east longitudes; click to uncheck the check boxes to signify south latitudes and west longitudes.

   The flashing star does not move to the adjusted coordinates until you click the Add City button.

5. **If the time zone is not accurate, select Time Zone and type in the correct number.**

   The Time Zone line shows the hours and minutes a zone is ahead (east of) of Greenwich Mean Time if the check box is checked; it shows how much a zone is behind (west of) Greenwich Mean Time if the box is not checked. You click to check or uncheck the box. (Greenwich Mean Time is the world's reference time zone. It is the standard time at the Greenwich Observatory, near London, England.)

   Map estimates the time difference based solely on longitude. Since the boundaries and time of time zones are determined politically, you may need to consult a time zone chart, map, atlas, or globe for the correct time shift.

6. **Click the Add City button.**

   The location is now recorded. When you next click at another spot, a flashing point appears at the added location.

   Once a location has been recorded (added), you cannot change its coordinates or time zone unless you remove it and then add it again.

   If a beep sounds, the location's name is already recorded.

To change or remove a location

Follow these steps if you want to correct the coordinates or time zone of a recorded location or if you want to to remove it from your map:

1. **Use either method described earlier to find the location.**

2. **Click the Remove City button.**

   The location is still shown on the screen, but it is no longer recorded.

3. **If you want to keep the location, but change the coordinates or time zone, type or edit the new numbers. Then click the Add City button.**

Setting the Current Location

You set the Current Location so you can use Map to compare distances and times between that location and any other point on the globe. (See the following section.) Though Map displays a large number of locations, you set only one Current Location.

You'll probably want to set the current location in the city where your computer is physically located, but if you want to pretend it's someplace else, that's OK too.

Like the time on your Macintosh clock, the Current Location is stored in your computer's battery-powered memory. The most recent setting is retained, even if you use another startup disk.

Application programs, such as travel information programs, and HyperCard stacks may call upon the Current Location.

To set the current location, follow these two simple steps:

1. **Find or Add the location you plan to set as your current location.**
2. **Click the Set button.**

   The displayed location is stored as the Current Location.

   A flashing cross, about the same size as the flashing star, now marks the current location. The flashing cross remains at that spot until you reset the current location.

Unless you are setting the Current Location for the first time, Map automatically adjusts the current time. For example, if you are changing your current location from San Francisco, in the –5 time zone, to New York, in the –8 time zone, at 8:00 in the morning (by your Macintosh clock), the time is immediately changed to 11:00 A.M. Your Alarm Clock desk accessory is changed as well.

When you close and reopen Map, the Current Location is always displayed.

Comparing locations

Once you've set the current location, you can use Map to determine the time anywhere in the world or determine the shortest distance (great circle route) between a selected location and your current location.

- **Select the location you want to compare with the current location, using any of the following four methods.**
  - Find a recorded location, either by typing its name and clicking the Find button or by clicking on a small flashing point.
  - Add a new location, typing the accurate coordinates and time zone.
  - Select an unnamed location by typing its coordinates, as follows: First, make the location name blank by selecting an unnamed location. Second, type the coordinates. Third, click the Find button or press Return to move the flashing star to the coordinates you just entered.
  - If the *approximate* time or distance is adequate, click any position on the map, even where there's no recorded location.

The current time is now the time at the selected location. If the time zone entry for the selected location is approximate, then the current time is approximate.

❖ *Note:* Click the words "Time Zone" to show the difference in time between the current location and the selected location. The words "Time Differ." then appear; click them to display the Time Zone again.

The shortest (great circle) distance—that is, a close approximation— between the current location and the selected location is also displayed.

CHAPTER 10

Special Installation

YOU CAN USE THE INSTALLER, FOUND ON *UTILITIES* DISK 1, TO CREATE A SMALL System Folder or to set up your Macintosh as an AppleShare® workstation. It works exactly like the Installer found in the Setup Folder on your *System Tools* disk. (The Installer is described in detail in the *Macintosh System Software User's Guide.)*

Creating a small System Folder

You can use the Installer on *Utilities* disk 1 to create a scaled-down version of the System Folder—less than half the size of the System Folder found on your *System Tools* disk—on a blank, initialized disk. This System Folder contains the minimum resources that you need to use your Macintosh. Although you can install a small System Folder on a hard disk, the special installation resources are designed to make it easier to use a 3.5-inch disk as your startup disk.

The Installer on *Utilities* disk 1 allows you to select a small System Folder for the Macintosh II, Macintosh Plus, or Macintosh SE. (See Figure 10-1.)

❖ *Note:* The installation resources are called Minimum Macintosh II, Minimum Macintosh Plus, and Minimum Macintosh SE. Do not confuse these with the Minimum Macintosh partition scheme described in Chapter 1, "Apple HD SC Setup."

The installer creates a System Folder containing a System file without those portions of the System file that are needed only by the other two machines. Consequently, you can use your disk as a startup disk only with the kind of Macintosh that you've selected. For example, if you select Minimum Macintosh Plus, you can't use the startup disk you're creating to start up a Macintosh SE or Macintosh II.

Your small System file includes only a limited number of fonts and desk accessories. To add more, use Font/DA Mover, which is found in the Font/DA Mover folder on *Utilities* disk 2 and described in Chapter 4 of this guide. The fonts and desk accessories normally found in the Macintosh System file are included in the Fonts file and Desk Accessories file in the Font/DA Mover folder on *Utilities* disk 2.

The small System Folder does not contain all the system software normally found in the System Folder on your *System Tools* disk. To add missing files, simply drag them into your System Folder from the System Folder on your *System Tools* disk or any other disk. Then restart your Macintosh.

❖ *Note:* To use MultiFinder with your small System Folder, add both the MultiFinder file and the DA Handler file to the System Folder. Then restart your Macintosh.

The small System Folder does not contain any printer resources. Drag any resources you need from the *Printing Tools* disk to your small System Folder.

Setting up an AppleShare workstation

If you plan to use your Macintosh as a workstation using the AppleShare file server, use the Installer to install the AppleShare workstation software, including the Access Privileges desk accessory, on an existing startup disk. Select AppleShare in the special installation dialog box. See the *AppleShare User's Guide* for additional instructions.

Using the Installer

These instructions assume your system has either two 3.5-inch disk drives or a hard disk and at least one 3.5-inch disk drive. Using the Installer on a system with a single 3.5-inch drive and no hard disk requires too much disk swapping to be practical.

❖ *Note:* With a single 3.5-inch disk drive and no hard disk, you may not want to install recent versions of the Macintosh system software. To install and make practical use of the latest system software, you need at least two 3.5-inch drives.

Follow these steps to install a small System Folder or AppleShare workstation software:

1. **Start up your Macintosh using *Utilities* disk 1 as the startup disk.**

   If you have a hard disk and only one 3.5-inch disk drive and you're planning to install onto a 3.5-inch disk, start up your Macintosh using your hard disk as the startup disk. Then copy both the Installer and the Special Installer Scripts folder from *Utilities* disk 1 to the disk-level directory on your hard disk.

2. **Select and open or double-click on the Installer icon.**

   The special installation dialog box appears. (See Figure 10-1.)

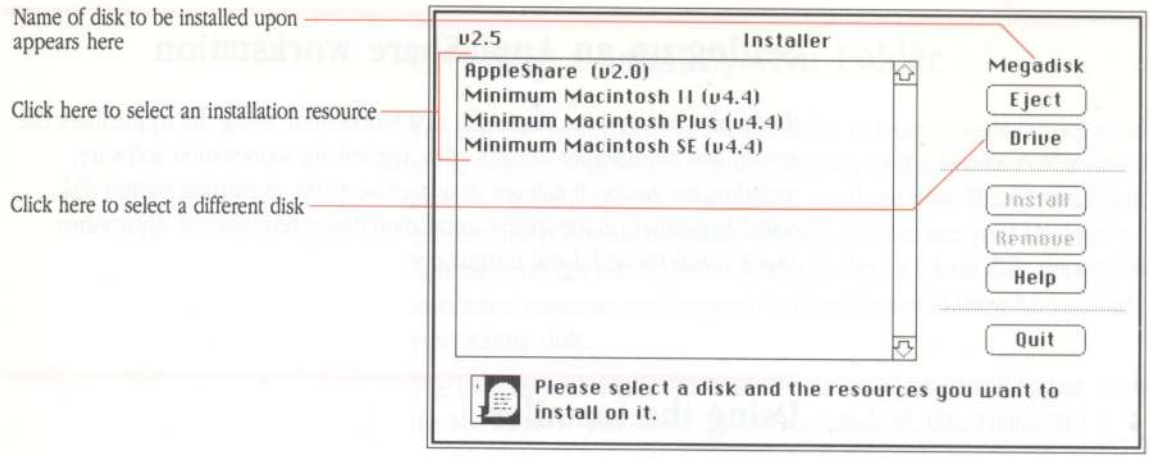


Figure 10-1
The special installation dialog box

3. **If you're planning to use a 3.5-inch disk as your startup disk, insert it into the empty 3.5-inch drive.**
   - You can only install a small System Folder on a blank, initialized disk.
   - You can only install AppleShare workstation software on a disk that already contains a System Folder.

4. **Use the Drive button to select your intended startup disk.**
   The name of the disk that's currently selected appears at the upper-right corner of the box (above the buttons). If it's not the name of the disk you want, click the Drive button until you see the correct disk name. (Eject and insert disks as needed.)

5. **Select the appropriate installation resource.**
   When you select a resource, there's a delay while the Installer calculates how much space will be left on your startup disk after installation.

6. **Click the Install button.**

7. **When you see a message reporting that installation has been successfully completed, click Quit to exit from the Installer.**

8. **Restart your Macintosh using the new or updated startup disk.**

Chapter 11: CloseView

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CloseView™ is a Macintosh utility designed to make it easier for visually impaired users to read or view screen images. It's so simple to use, however, that anyone who wants to take a closer look at the screen may find CloseView valuable.

With CloseView installed, you can magnify the contents of your screen two to sixteen times. You can also **invert** the display of the entire screen to make images appear white on black instead of black on white, and vice versa.

When you use CloseView, you work with application programs, desk accessories, and the Finder the same way you would without CloseView. When you print a document or make a **screen shot,** CloseView's magnification and inversion features are ignored.

You can use CloseView on the Macintosh Plus, Macintosh SE, or Macintosh II, as long as you are using a current or recent version of Macintosh system software with a modular Control Panel.

On the Macintosh II, CloseView works best in black and white. In general, the smaller you set the number of colors or grays in the Monitors module of your Control Panel, the faster CloseView performs. (If CloseView is installed, you may have to scroll the Control Panel icons so you can select the Monitors icon. When you reset the number of colors or grays, restart your Macintosh to activate the new settings.)

CloseView was created for Apple Computer, Inc. by Berkeley System Design, based upon its inLARGE™ program.

INSTALLING CLOSEVIEW

CloseView is found on *Macintosh Utilities* disk 2. It's identified by the magnifying glass icon.

To use CloseView for the first time, you must put a copy of the CloseView utility into the System Folder on the disk that you plan to use as your startup disk. Follow these five steps:

1. Start up your Macintosh using the startup disk that you want to use with CloseView.

2. Make sure the System Folder is visible.

   Current versions of the System Folder are marked by a Macintosh icon on the folder icon, as shown in Figure 11-1.

3. Insert *Utilities* disk 1.

4. Copy CloseView into the System Folder by dragging the icon representing CloseView onto the System Folder on your startup disk.

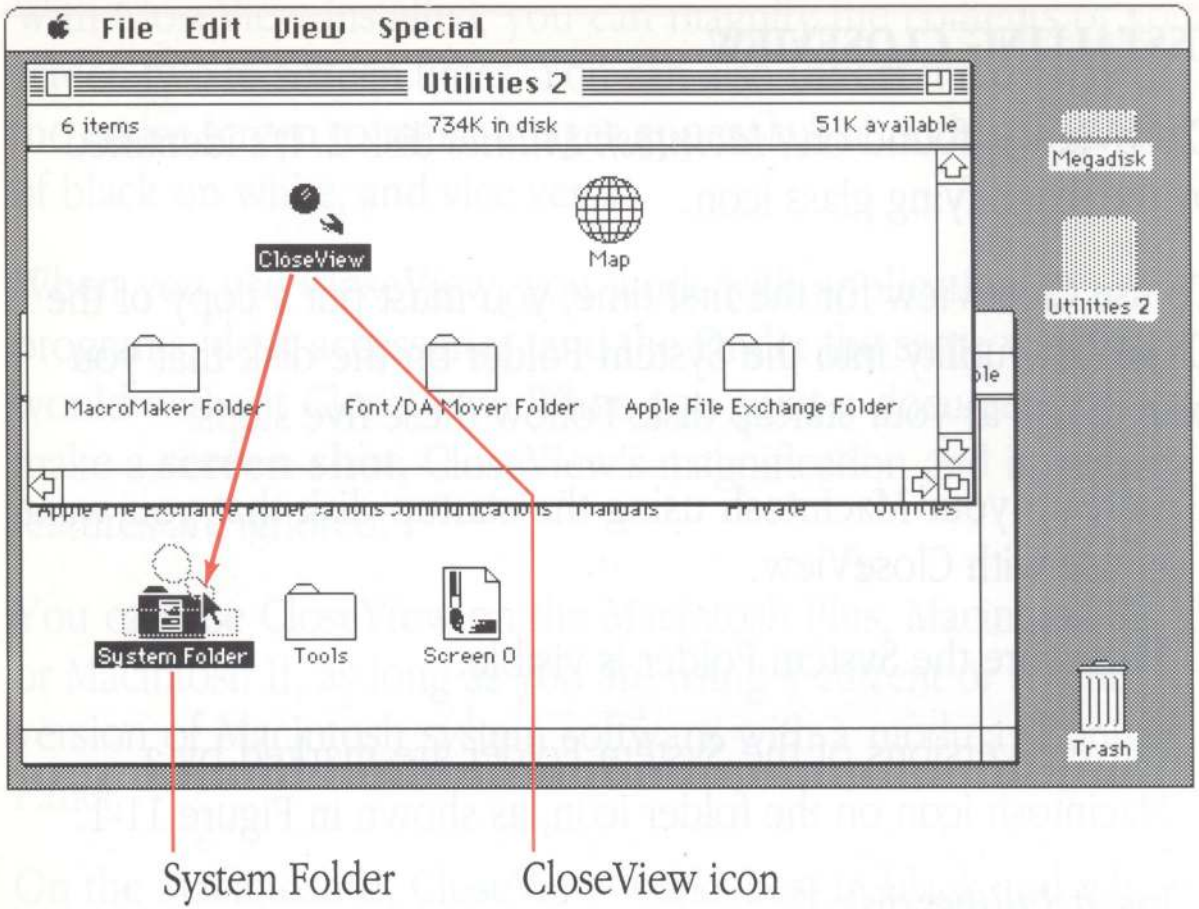


Figure 11-1 Installing CloseView

5. Restart your Macintosh.

   CloseView is now installed. A thick rectangular outline, called the **frame,** marks off a small portion of your screen.

❖ *Note:* For more on startup disks, designating the startup device, and startup procedures, see your *Macintosh System Software User's Guide* or Chapter 1, "Apple HD SC Setup," in this manual.

FRAMING YOUR VIEW

The first time you use CloseView, the rectangular frame marks off approximately 1/16 of the screen. Except when magnification is turned on, the frame is shown whenever CloseView is installed. See Figure 11-2.

The frame works like the rim of a magnifying glass, marking off the portion of the screen that will be magnified. To ensure that the marked portion includes the area where you are working, the frame follows the movement of the pointer or insertion point.

■ To move the frame, use the mouse to move the pointer.

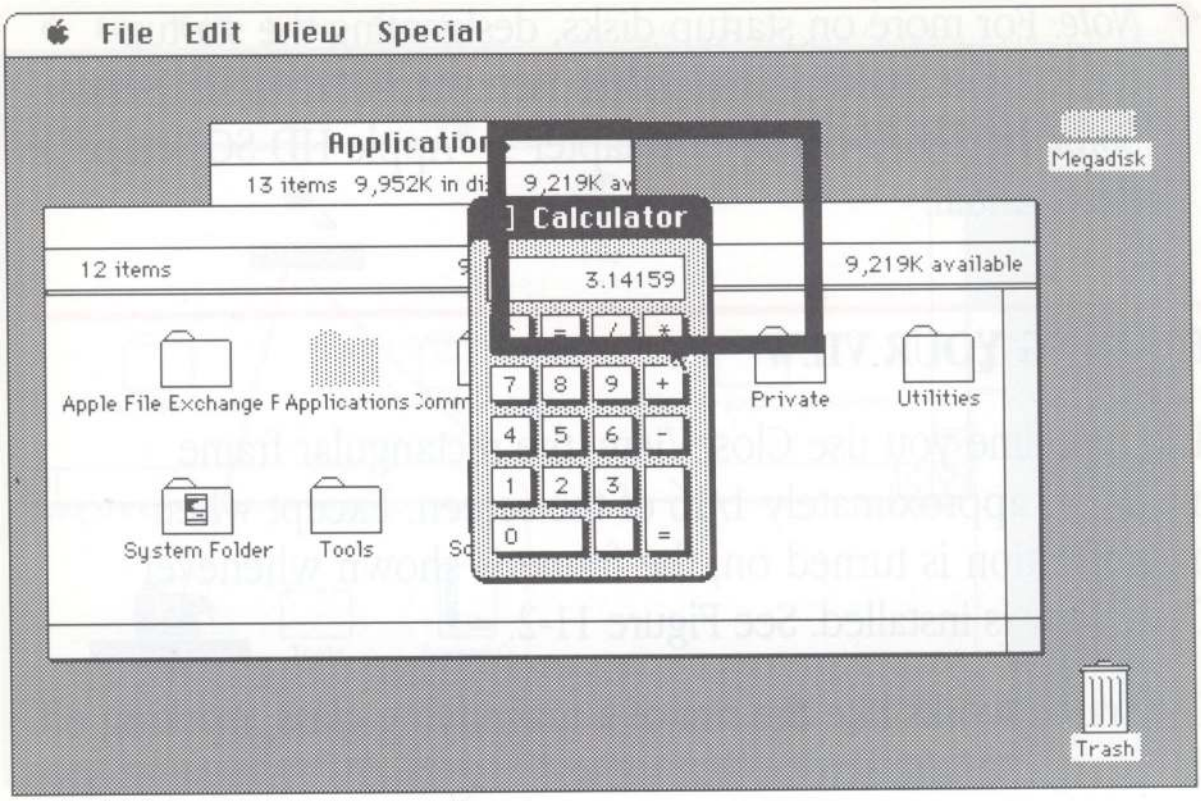


Figure 11-2 The frame appears on the screen

MAGNIFYING THE SCREEN

You can turn magnification on and off, as well as change the power of magnification, by using your keyboard. (See "Using the Control Panel," later in this chapter, for an alternate method.)

Turning magnification on and off

Anytime the frame is visible on the screen, you can turn on magnification.

- To turn on magnification, hold down the Option and Command keys and press X. Then release the keys.

  The contents of the frame are immediately enlarged and fill your screen.

  As you continue your work, the enlarged screen is continuously updated.

Anytime your screen is magnified, you can turn off magnification.

- To turn off magnification, again hold down the Option and Command keys and press X. Then release the keys.

  The screen returns to normal size and the frame reappears.

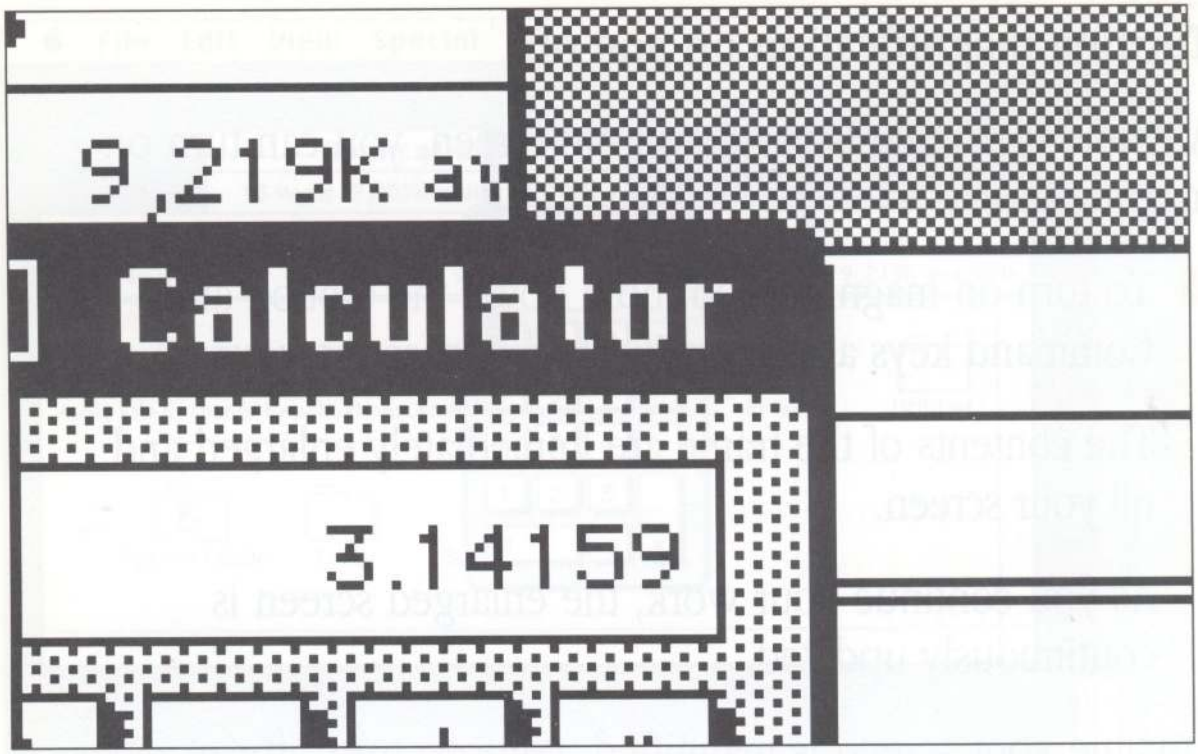


Figure 11-3 A Macintosh SE screen magnified by four

Changing your view

When magnification is turned on, the screen resembles the view through the lens of a magnifying glass held above a page. As you type or move the pointer, the lens moves across (or up or down) the "page"—that is, the original screen.

- To scroll a hidden portion of the original screen into view, move the pointer toward the hidden portion.

  Unless you are at the edge of the original screen, a new portion of the screen comes into view.

When you're typing, the view changes as the insertion point moves. When text wraps to a new line, the view moves along with it; all you have to do is type. (This feature may not work properly with all applications.)

Changing the power of magnification

You can set the power of magnification anywhere from 2x to 16x. Whenever you increase the power of magnification, the magnified image is enlarged or, if magnification is turned off, the frame is reduced by the same proportion.

- To increase the power of magnification by one, hold down the Option and Command keys and press the Up Arrow key (↑). Then release the keys.

- To decrease the power of magnification by one, hold down the Option and Command keys and press the Down Arrow key (↓). Then release the keys.

To check the value of the magnification power, use the Control Panel.

INVERTING THE DISPLAY

You can change the display on your screen so it appears white on black rather than black on white. To do this, select the White on Black button in the Display section of the CloseView Control Panel. See the following section for details.

USING THE CONTROL PANEL

You can use the Control Panel desk accessory to control all of CloseView's features. Follow these steps.

1. Choose Control Panel from the Apple menu at the left of your menu bar.

   The position of the Control Panel desk accessory in the Apple menu depends upon which other desk accessories are installed.

The Control Panel appears, as shown in Figure 11-4. The General icon is selected on the left.

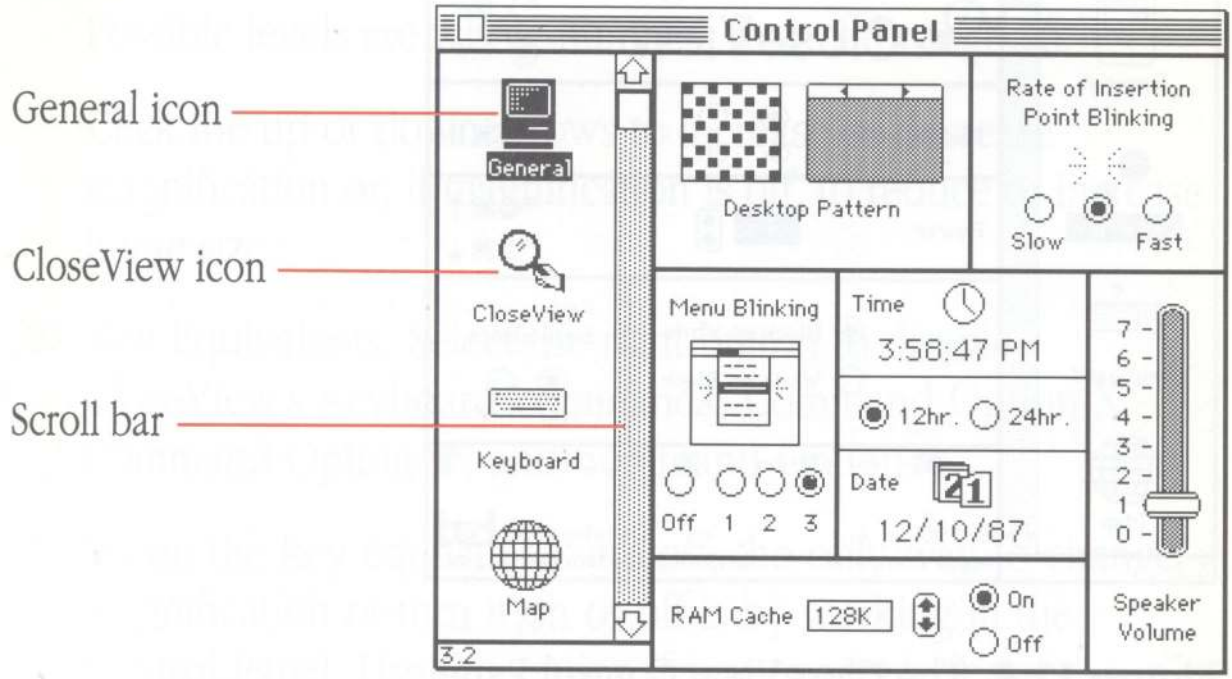


Figure 11-4 The Control Panel

2. Click to select the CloseView icon.

   If the CloseView icon is not visible, scroll until it is by clicking the scroll bar's gray area or clicking the down arrow.

The CloseView Control Panel appears. (See Figure 11-5.)

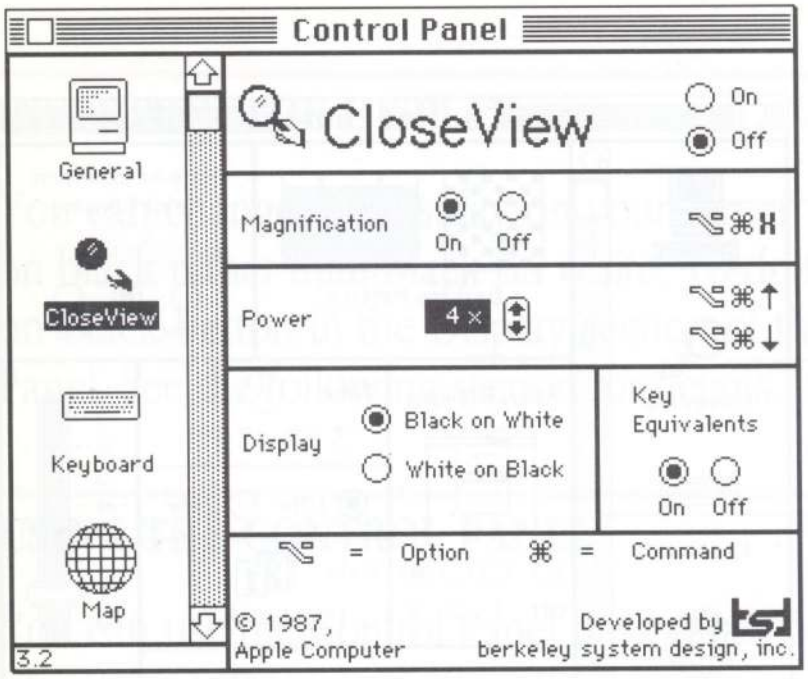


Figure 11-5 The CloseView Control Panel

The CloseView Control Panel is divided into five functional sections:

- On-Off. Select the lower button to turn CloseView off. Select the top button to turn CloseView on. CloseView is turned on automatically whenever you restart your Macintosh.

- Magnification. Select the left button to turn magnification on. Select the right button to turn magnification off.

- Power. The current level of magnification is displayed here. Possible levels are whole numbers from 2 through 16.

  Click the up or down arrows to increase or decrease magnification or, if magnification is off, to reduce or increase frame size.

- Key Equivalents. Select the right button to disable CloseView's keyboard commands: Command-Option-X, Command-Option-↑, and Command-Option-↓.

  When the key equivalents are off, the only way to change magnification or turn it on or off is by working in the Control Panel. Use this option if you expect to leave magnification on at the same power for extended periods, and you don't want anyone to change the settings by mistake, or if your application program requires the same keyboard combinations.

  Select the left button to turn the keyboard commands on again. Use this option if you expect to turn magnification off and on frequently, or to change the power of magnification often.

- *Note:* You can't use MacroMaker to assign alternate key equivalents for CloseView.

- Display. Select the lower button to invert the screen to white on black, as shown in Figure 11-6. Select the upper button to return the display to normal. There is no keyboard equivalent for this feature.

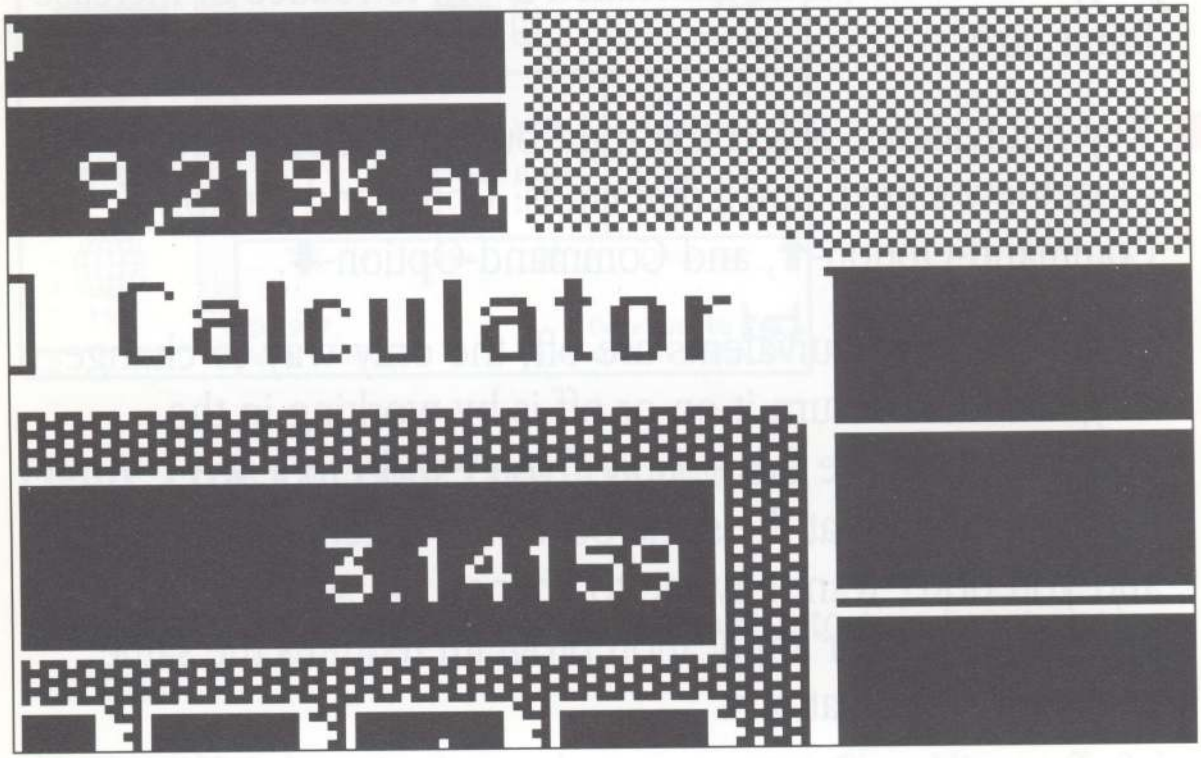


Figure 11-6 The screen in Figure 11-3 shown inverted

Control Panel settings, unlike settings made using the keyboard commands described earlier, are retained when you restart your Macintosh.

TURNING CLOSEVIEW OFF AND ON

When CloseView is on, the frame is always visible unless you are using CloseView to magnify the screen. If you want to work with a normal size screen without the frame, you can turn CloseView off.

- To turn CloseView off, click the Off button at the top of the CloseView Control Panel. (See "Using the Control Panel," earlier.)

When you turn CloseView on again, the Key Equivalents setting remains the same. Use either of the following methods to turn CloseView on:

- Click the On button at the top of the CloseView Control Panel. (See "Using the Control Panel," earlier.)

  Using this method, the Magnification, Power, and Display settings remain the same as they were when you turned CloseView off, whether you set them using the Control Panel or your keyboard.

- Restart your Macintosh.

  Using this method, Magnification, Power, and Display return to the last settings you made using the Control Panel.

REMOVING CLOSEVIEW

When CloseView is installed, it takes up at least 40K of **random-access memory (RAM).** If you're using it with color on a Macintosh II, CloseView can take up as much as 330K. If you need that space, remove CloseView when you aren't using it. Follow these steps.

1. Make sure the System Folder containing CloseView is visible.

2. Open the System Folder by selecting its icon and choosing Open from the File menu, or by simply double-clicking the System Folder icon.

3. Drag the CloseView icon out of the System Folder.

   If you plan to reinstall CloseView later, you can leave it on the disk or in another folder on the disk where you can easily find it and drag it back into the System Folder. Later, if you reinstall CloseView and restart your Macintosh, CloseView is automatically turned on. The other CloseView settings—Magnification, Power, Display, and Key Equivalents—remain the same as when you last set them in the Control Panel.

If you want to throw the CloseView utility away entirely, you can drag it to the Trash—but be sure you have a backup copy.

4. Restart your Macintosh.

CloseView is no longer installed.

❖ *Note:* You can leave CloseView in your System Folder but keep it from being installed by holding down the mouse button while starting up your Macintosh. Release the mouse button when the "Welcome to Macintosh" message disappears.

REFERENCE

This section summarizes the commands and icons you need to know about to use CloseView.

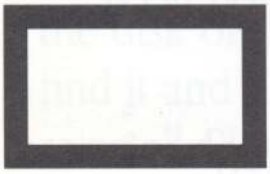
The CloseView icon. The magnifying glass icon represents CloseView on *Utilities* disk 1 and in the Control Panel that is presented when CloseView is installed.

Drag the CloseView icon into the System Folder on your intended startup disk to begin the installation of CloseView.

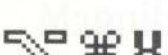
Once CloseView is installed, select the CloseView icon in the Control Panel to present the CloseView Control Panel, as shown in Figure 11-4.

Drag the CloseView icon out of the System Folder to remove the CloseView utility.

The Control Panel desk accessory (in the Apple menu). You can open the Control Panel whether you are working in the Finder or in an application program.



The frame. The frame appears whenever CloseView is on but magnification is turned off. It marks off that portion of the screen that will fill the screen when you turn magnification on.



Option-Command-X. Press these keys simultaneously to turn magnification on or off.

This keyboard command does not work when Key Equivalents is turned off in the CloseView Control Panel.

⌥⌘↑ Option-Command-↑. Press these keys simultaneously to increase magnification by one power. The maximum power is 16x.

When magnification is turned off, this command reduces the size of the frame.

This keyboard command does not work when Key Equivalents is turned off in the CloseView Control Panel.

⌥⌘↓ Option-Command-↓. Press these keys simultaneously to decrease magnification by one power. The minimum power is 2x.

When magnification is turned off, this command increases the size of the frame.

This keyboard command does not work when Key Equivalents is turned off in the CloseView Control Panel.

The Restart command (in the Finder's Special menu). The Restart command ejects all 3.5-inch disks, shuts down your Macintosh, and immediately restarts it.

To complete the installation of CloseView on a hard disk that you've designated your startup device, Choose Restart from the Special menu.

You also use Restart or the Shut Down command to complete the removal of CloseView from the System Folder on your current startup disk.

The Shut Down command (in the Finder's Special menu). The Shut Down command ejects all 3.5-inch disks, shuts down your Macintosh, and darkens the screen, with the exception of a Restart button and a brief message.

To complete the installation of CloseView on a 3.5-inch disk, choose Shut Down from the Special menu, reinsert the disk containing the System Folder with the CloseView utility, and click Restart.

You also use Shut Down (or the Restart command) to complete the removal of CloseView from the System Folder on your current startup disk.

System Folder

The System Folder. The System Folder is identified, in current versions of the Finder, by a Macintosh icon within a folder icon.

You copy the CloseView utility into the System Folder on your intended startup disk to begin the installation of CloseView.

APPENDIX

Moving Through the File System

YOUR MACINTOSH USES THE HIERARCHICAL FILE SYSTEM, WHICH ALLOWS you to organize your files—that is, system files, application programs, and documents—on your disks by placing them in folders. It is called a *hierarchical* file system because you can place, or nest, folders within folders.

As illustrated in Figure A-1, each disk represents the top level of a hierarchy containing all the files and folders on that disk. The hierarchical file system, including the material in this appendix, is discussed in greater detail in your *Macintosh System Software User's Guide*.

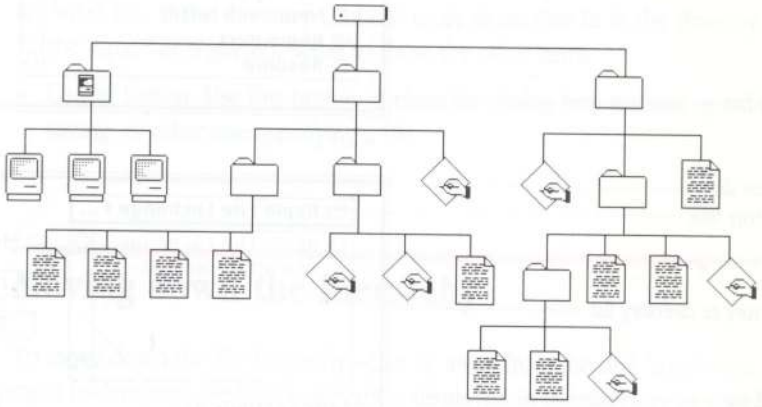


Figure A-1
A sample hierarchical file structure

While working in the Finder, you can actually view each folder and its contents by opening, closing, and moving the windows that represent folders and disks. And you can move or copy files from folder to folder simply by dragging them.

If you're using an application program or desk accessory, however, you use the hierarchical file system by working with directory dialog boxes such as those shown in Figure A-2. Each program presents its own variations of the dialog box, but you use them all the same way, whether you're opening a file, saving a document, or specifying a folder. In fact, once you've used your Macintosh for a while, you probably won't even notice the minor differences.

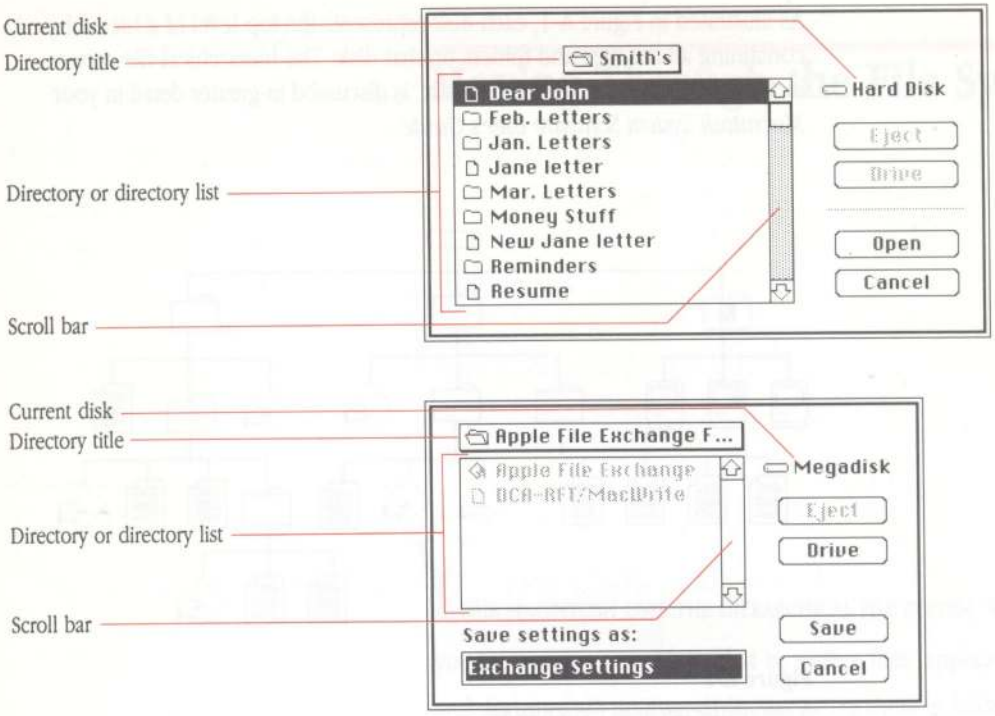


Figure A-2
Two typical directory dialog boxes

Notice that all directory dialog boxes contain at minimum the following features:

- Current disk. This is the name of the disk that the rest of the dialog box governs. The icon identifies it as either a hard disk or a 3.5-inch disk.
- Eject button. If the current disk is a 3.5-inch disk, you can click this button to eject that disk.
- Drive button. Use this button to switch disk drives. Each time you click Drive another 3.5-inch disk (if one is inserted) or hard disk (if one is connected) becomes the current disk.

- Directory title. This represents either the current disk or a folder on the current disk.
- Directory or directory list. This shows, in alphabetical and numerical order, some or all of the files and folders stored directly in the folder or disk named above. However, it does not show items nested in folders that are shown in the directory.
- Scroll bar. If the directory contains more items that fit in the directoy list, the scroll bar is grayed. Scroll to show the other items.
- Cancel button. Use this button to close the dialog box without opening, saving, or otherwise specifying a file.

Moving down the hierarchy

To move down the file hierarchy—that is, away from the disk level—you open folders until the item you want is displayed in the directory or specified as the directory name.

- **To open a folder that is listed in the directory, double-click its name.**

  If there is an Open button or an Open Folder button, you can also click to select the name of the folder and then click that button.

  The name of the selected folder becomes the directory title, and its contents are listed in the directory. Use the same method to open any folder in the new directory.

Moving up the hierarchy

You can also move up the hierarchy—that is, toward the disk level—by working in the directory dialog box. Follow these steps.

1. **Use the mouse to position the pointer on the directory title, and press the mouse button down.**

   As shown in Figure A-3, the chain of folders leading to the disk directory is shown under the name of the current disk. It's similar to pulling down a menu.

2. **Drag the pointer down to the folder (or disk) that you want to specify as the directory name.**

The folder (or disk) that is highlighted when you release the mouse button becomes the new directory title. Folders directly nested within that folder (or disk) are now displayed in the directory list.

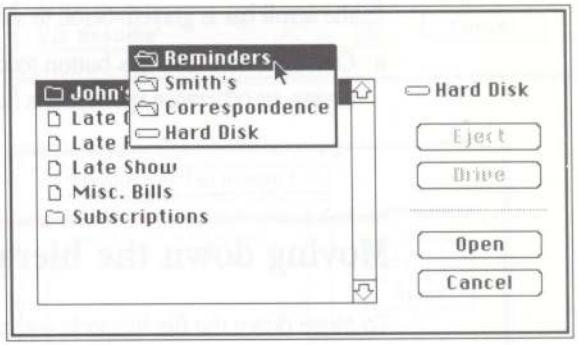


Figure A-3
Moving toward the disk directory

❖ *Note:* Whenever you use the Eject or Drive button to switch disks, you automatically move to the top of the file hierarchy for the new disk. That is, the disk is shown as the directory name.

Moving across the hierarchy

If you're working in a folder and want to move to a folder in another branch of your file structure, just move up the hierarchy to a directory in which both folders are nested. Then move back down again.

Glossary

Apple menu: The farthest-left menu in the menu bar, indicated by an Apple symbol, from which you choose **desk accessories.**

application or **application program:** A program written for some specific purpose, such as word processing, database management, graphics, or telecommunication.

back up: (v.) To make a spare copy of a disk or of a file.
backup: (n.) A copy of a disk or file.

background: A program operates "in the background" if it continues to function, automatically, while you use another program.

binary: The representation of numbers and other characters in the base-2 system, using only the two digits 0 and 1.

choose: To pick a command by dragging through a menu. You often choose a command after you've selected something for the program to act on. See also **select.**

control character: On ProDOS and MS-DOS computers, a nonprinting character that controls or modifies the way information is printed or displayed. Control characters are typed by holding down the Control key while pressing some other key. In the Macintosh family, the Command key performs a similar function.

current startup disk: The disk that contains the system files the computer is currently using. The startup disk icon is usually in the upper-right corner of the desktop.

desk accessories: "Mini-applications" that are available from the **Apple menu** regardless of which application you're using.

destination: (adj.) Describes the disk or folder that receives a copied or translated file, as in *destination disk.*

directory: A pictorial, alphabetical, or chronological list of the contents of a folder or a disk.

driver: A program that lets a peripheral device and a computer send and receive information. Printer drivers control printers; a hard disk driver controls exchanges between a hard disk and a computer.

eligible: (adj.) In Apple File Exchange, a file is *eligible* if it can be translated with a selected translator or translators.

filename: The name that identifies a file. The maximum character length of a Macintosh filename is 31 characters for a document or folder, 27 characters for a disk. A name can't contain a colon (:), and it should not begin with a period (.).

font: A complete set of characters in one design, size, and style.

frame: In CloseView, the frame is a thick rectangular outline that marks off the portion of the screen that will fill the screen when you turn on magnification.

free space: The portion of a disk that is not contained in a **partition.**

global backup: The process of backing up all the files on a hard disk.

hierarchical file system (HFS): A form of computer memory organization in which files, including folders, can be nested within folders.

icon: An image that graphically represents an object, a concept, or a message. For example, Disk First Aid is represented by an ambulance; CloseView is represented by a magnifying glass.

incremental backup: The process of backing up all files on a hard disk that have been created, modified, or copied onto the disk since the last **global backup**.

initialize: To prepare a blank disk to receive information by organizing its surface into tracks and sectors.

invert: To change a portion or all of your Macintosh screen so it appears as white on black instead of as black on white.

keystroke: A key or key combination that you assign to a **macro.** When pressed, it triggers the playing of the macro's **script.**

macro: A recorded sequence of characters and commands, identified by a name and possibly triggered by a **keystroke.** Using MacroMaker, you can call upon a macro to play while you're working in an application. See also **script.**

modifier key: A key that you press in combination with a readable character to change its meaning. Sometimes you press a modifier key to change the action of clicking or dragging. Examples of modifier keys are Command and Option.

MS-DOS: The Microsoft Disk Operating System. It's the operating system that governs the IBM PC (under the name PC-DOS) and compatible computers.

operating system: A program that organizes the actions of the parts of the computer and its peripheral devices.

partition: (n.) A portion of a memory device—such as a hard disk or tape—that is treated like a device itself. For example, if you select the 50% Macintosh partition scheme provided by Apple HD SC Setup, your Macintosh volume, shown as a hard disk in the Finder, will take up about half your hard disk. (v.) To create partitions.

power: In CloseView, the level of magnification. For example, with the power set at 4x, screen images appear four times as large when magnified.

ProDOS: The Professional Disk Operating System. It's the operating system that today controls most Apple II–family computers.

random-access memory (RAM): The part of a computer's memory that stores programs and other information temporarily while you're working with it.

scratch: Disk space not normally available in the Macintosh operating system, but requested by some programs—Macintosh and non-Macintosh—for use as temporary storage.

screen shot: A MacPaint document that is like a snapshot of your Macintosh screen. You make a screen shot by holding down the Command and Shift keys while pressing 3.

script: In MacroMaker, a recorded sequence of characters and commands, part of a **macro.**

SCSI: See **Small Computer System Interface.**

SCSI ID number: A number assigned to each SCSI device connected to a computer. The device with the highest number has priority if a conflict occurs while sending or receiving data. Some devices, such as internal hard disks, have preset SCSI ID numbers. On others, such as external hard disks, you use a SCSI ID switch to set the ID number.

select: To designate where the next action will take place. To select, you click an icon or drag across information.

Small Computer System Interface (SCSI): A specification of mechanical, electrical, and functional standards for connecting intelligent peripherals such as hard disks, printers, and optical disks to small computers.

source: (adj.) Describes files that are being copied or translated as well as the disk or folder containing source files.

startup disk: A disk with all the necessary program files—such as the Finder and System file contained in the Macintosh System Folder—to set the computer into operation.

System file: A file Macintosh computers use to start up and to provide system-wide information.

System Folder: A folder containing the System file plus other important programs for controlling the Macintosh and its peripheral devices.

text file: A file that contains information stored in the form of readable characters. On the Macintosh, they are known as Text Only documents. On the Apple II, they are called TXT files.

translation menu: A menu, such as "Mac to MS-DOS" or "Mac to Mac," that appears when two disks are shown in the Apple File Exchange window.

translator: The information that the Apple file exchange utility needs to translate a document created with an application on one operating system into a document that can be used with a similar application on another operating system.

translator file: A file containing one or more Apple File Exchange translators.

volume: A general term referring to a storage device; a source of or a destination for information.

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THE APPLE PUBLISHING SYSTEM

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Text type and display type are Apple's corporate font, a condensed version of Garamond. Bullets are ITC Zapf Dingbats®. Some elements, such as program listings, are set in Apple Courier, a fixed-width font.

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